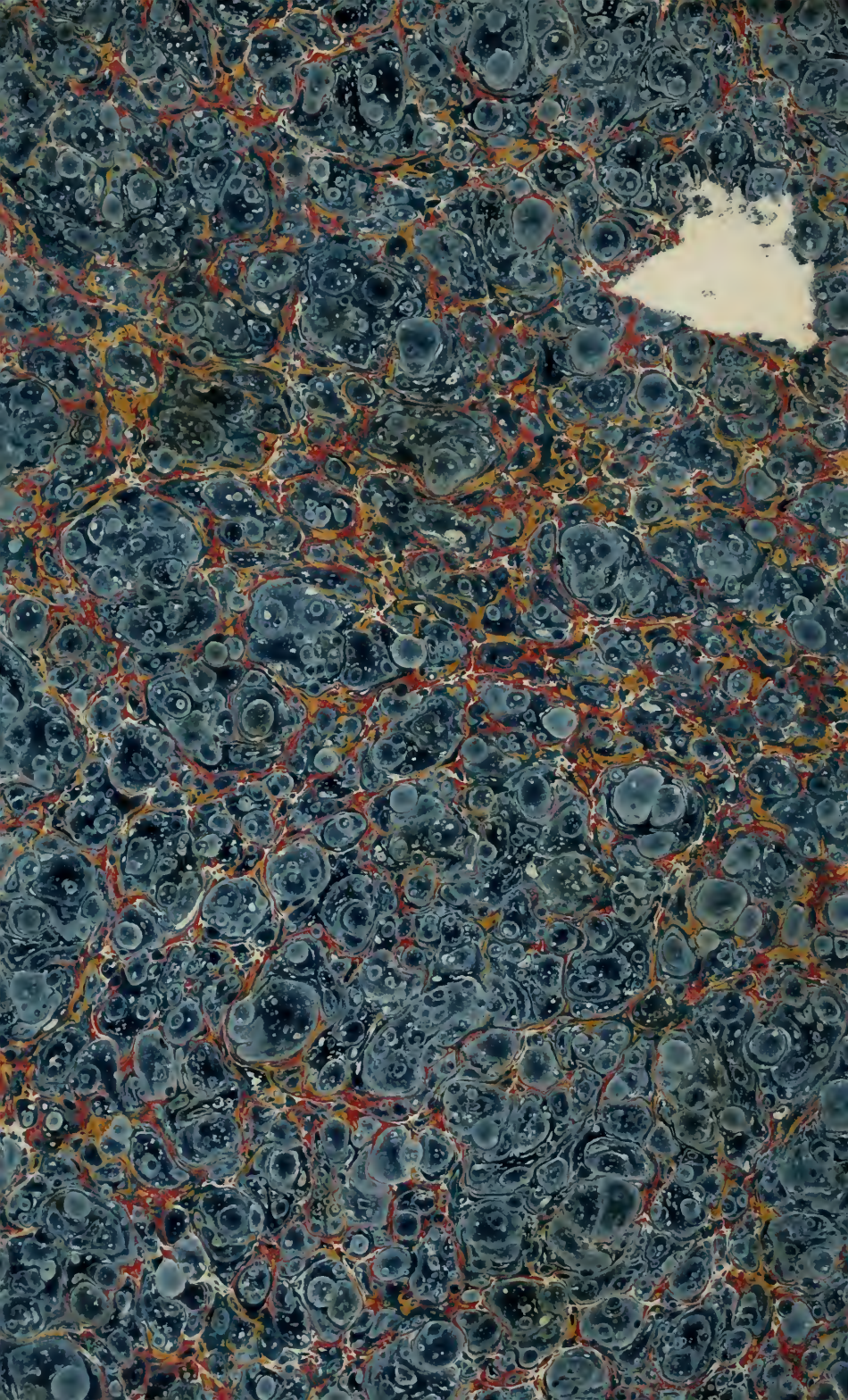
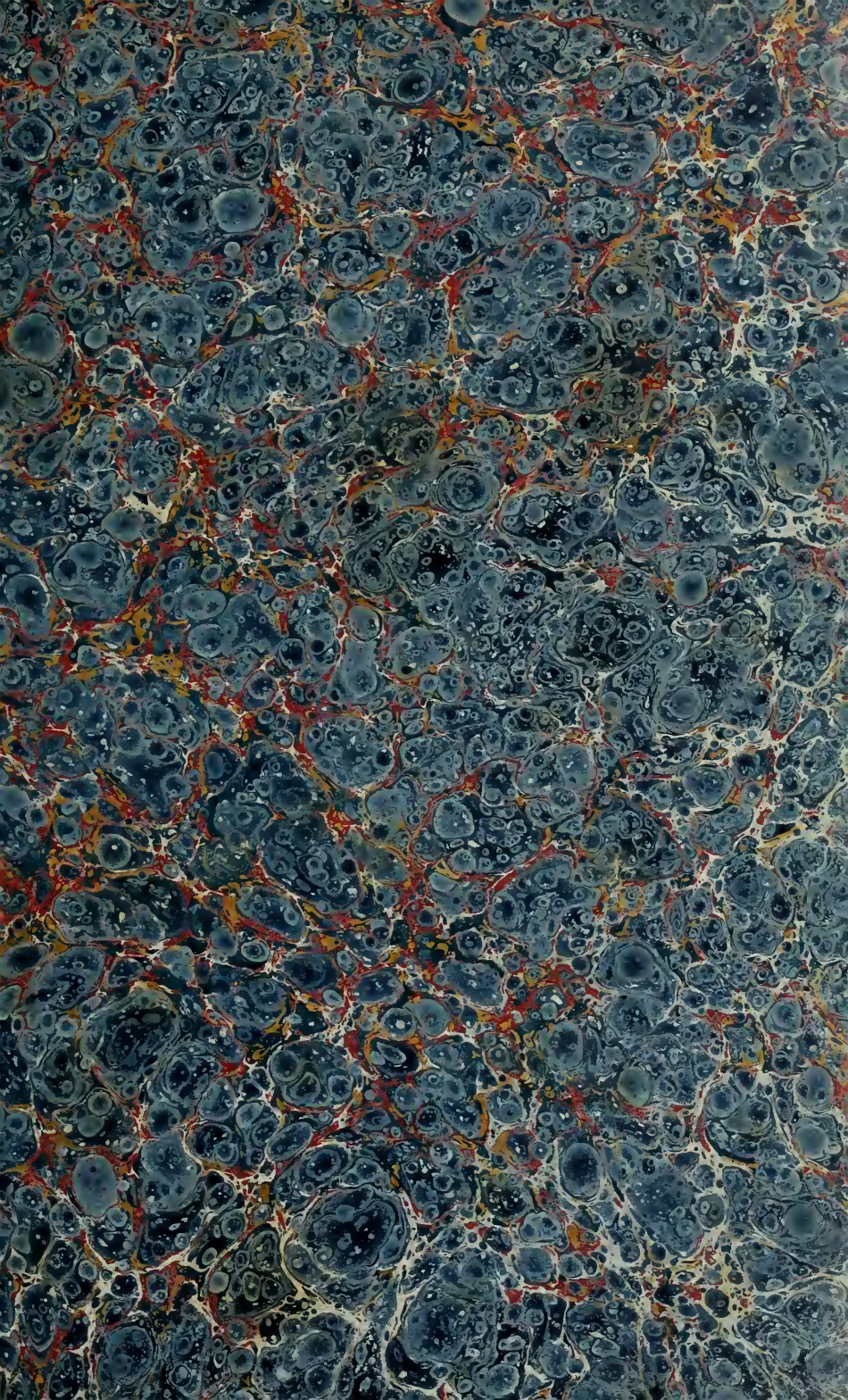




Digitized by the Internet Archive
in 2010 with funding from
Research Library, The Getty Research Institute

http://www.archive.org/details/treatiseoncarria01felt

A

TREATISE

ON

CARRIAGES.

IN TWO VOLUMES.

VOLUME I.

Entered at Stationer's-Hall.

A

TREATISE

ON

CARRIAGES;

COMPREHENDING

COACHES, CHARIOTS, PHAETONS,
CURRICLES, GIGS, WHISKIES, &c.

TOGETHER WITH THEIR PROPER

HARNESS.

IN WHICH

THE FAIR PRICES OF EVERY ARTICLE
ARE ACCURATELY STATED.

By WILLIAM FELTON, Coachmaker,
No. 36, LEATHER-LANE, HOLBORN.
And No. 254, OXFORD-STREET, near GROSVENOR-SQUARE.

LONDON:

PRINTED FOR AND SOLD BY THE AUTHOR;

And by J. Debrett, Piccadilly; R. Faulder, New Bond-Street; J. Egerton, Whitehall; J. White, Fleet-Street; W. Richardson, Cornhill; A. Jameson, Long-Acre; and all other Booksellers in Great Britain and Ireland.

1796.

ADVERTISEMENT.

THE nature of the ſubject here treated of, does not require any great ſhare of literary abilities, otherwiſe the Author is not vain enough to have attempted it: his education and profeſſion effectually debar him from any pretenſions in that way; and he therefore hopes, that any inaccuracies in point of ſtyle will be overlooked, and if he has expreſſed himſelf ſo as to be underſtood, is all he aims at.

As the Author underſtood that a number of the Coachmakers, on hearing of his intended publication, had declared their diſapprobation of it in very pointed terms, and as he pretends not to any ability in his profeſſion ſuperior to that of other tradeſmen, he was willing to ſubmit his various ſtatements to their conſideration; and, with that view, wrote a LETTER *to twelve of thoſe whom he conſidered as the principal in the trade, from whom, however, he did not receive any anſwer, but which, it is hoped, will ſufficiently juſtify the Author with the Public from having the leaſt intention to injure the* fair *trader.*

COPY

COPY OF THE LETTER

ABOVE REFERRED TO.

SIR,

I TAKE the liberty of acquainting you, that I have completed for the preſs (which ſoon will be publiſhed) A Treatiſe on Carriages and Harneſs: But conceiving that this may be conſidered as an attempt to injure the trade, I can aſſure you I have no ſuch intention; and, to ſatisfy you that I have not, I am ready to ſubmit the different prices I mean to publiſh, to the conſideration of any candid and reſpectable perſon whom the trade may chuſe to nominate; and if I ſhall be ſatisfied that theſe prices are not fair both to the trade and the employer, I am willing they ſhould be corrected.

I have ſent this notice to twelve, whom I conſider as the principal of the profeſſion—and, if they chuſe to appoint any one to meet me on the buſineſs, I have no doubt that every thing will be adjuſted to the general ſatisfaction.

I am, Sir, &c.

(Signed) WILLIAM FELTON.

CONTENTS.

	Page
INTRODUCTORY OBSERVATIONS	xvii
BUILDING	1
CHAP. I. BODIES	5
Chariot or Poſt-Chaiſe Body	8
Coach Body	19
Landau or Landaulet Body	22
Landaulet or Demi-Landau Body	25
II. PHAETON, CURRICLE, OR CHAISE BODIES	27
Gig Body	29
Half-pannel or Whiſkey Body	32
Value of Bodies in their naked ſtate	34

CHAP.

CHAP. Page

III. FOUR-WHEELED CARRIAGES 39

Perch Carriage 43

Crane-neck Carriage 53

IV. TWO-WHEELED CARRIAGES 58

Price of Carriages 65

Carving—Obſervations 68

V. IRON-WORK 70

Springs 71

Coach and Chariot Springs 73

Double Springs 74

Gig Springs *ib.*

Long-tail Phaeton Springs 75

Scroll Spring *ib.*

Graſshopper or Double Elbow Springs 76

Single Elbow Spring *ib*

Loop Spring 77

French-horn Spring *ib.*

Worm or Spiral Spring 78

Spring Jack *ib.*

Price of Springs, &c. 79

Axletrees 81

Axletree-Boxes 82

Common Axletree and Box 84

Patent Anti-attrition Axletreee and Box 85

Patent Cylinder Axletree and Box 87

New Pattern Cylinder Axletree and Box 89

New

CHAP. Page

New Pattern Axletree, with double Cafe Box 90
Price of Axletrees . . 92
Cranes . . . 94
Stays 95
Plates 98
Sockets or Caps . . . 101
Hoops and Clips . . . 102
Bolts, Nuts, and Screws . . 103
Rings, Staples, Loops, and Shackles 105
Joints and Props . . 107
Steps . . . 108

VI. WHEELS . . . 109
The Patent, or Bent-Timber Wheel 113
Price of Wheels . . 114
Boots or Budgets . . 115
Price of Boots and Budgets . 119

VII. PLATFORMS, OR RAISED HIND AND FORE ENDS, AND BLOCKS 120
Raiſed Hind Ends, Pump Handles, and Short Blocks . . . 121
Raiſed Fore Ends or Fore Blocks . 122
Spring Blocks . . . *ib.*
Cuſhions and Standards . . 123
Price of Raiſed Hind and Fore Ends, &c. 124

VIII. COACH-BOXES . . 125
Standard Coach-Box . . 126
Saliſbury Coach-Box . . *ib.*

Iron

CHAP. Page

Iron Coach-Box - - 127
Travelling Coach-Box - - 128
Chaiſe Coach-Box - - 129
The Coach-Box Seat and Cradle - 130
Price of Coach-Boxes, Seats, and Cradles 131
TRIMMINGS - - 132
Price of Laces - - 134
Fringes - - - - 135
Price of Fringes - - 136
Holders and Strings - - *ib.*
Price of ditto - - 139

IX. THE LININGS AND INSIDE FURNITURE OF BODIES. - - 140

Squabs, Curtains, Venetian-Blinds, &c.

Quantity of Materials uſed for Linings 150
Price of Linings - - 151
Price of Inſide Furniture - - 152

X. HAMMERCLOTHS - - 153
Oil-ſkin Hammercloths - - 154
Price of Hammercloths - 157

XI. PLATED, BRASS, AND COMPOSITION METAL FURNITURE FOR BODIES 159

Door Plates - - - 160
Door Hinges - - - *ib.*
Door Locks and Handles - - 161
Private Locks - - - *ib.*
Dove-tailed Ketches - - 162

Glaſs

CHAP. Page

Glaſs Rollers – – – 162

Buttons or Studs – – – 163

Price of each – – *ib.*

Plating – – – 164

Braſs and Coloured Metal Furniture – 166

Mouldings or Beads – – 167

Price of Mouldings, and Scroll and Tip Ornaments – – 169

Frames – – – *ib.*

Price of Frames – – 171

Head Plates – – – *ib.*

Price of Head Plates – – 173

Real and Sham Joints – – 174

Price of Real and Sham Joints – 175

Body Loops – – – *ib.*

Price of Body Loops – – 176

Pole Hook – – – *ib.*

Price of Pole Hooks – – 177

Buckles – – – *ib.*

Price of Buckles – – 178

Check-Brace Rings and Door-Handles *ib.*

Price of Check-Brace Rings and Door-Handles – – 179

Wheel Hoops – – – *ib.*

Price of Wheel Hoops – 180

XII. LAMPS – – – 181

Price of Lamps – – 183

Reflectors

CHAP. Page

Reflectors for Lamps – – 185

XIII. STEPS – – – 187

Inside Folding-Steps – – *ib.*

Step-Plates and Stops – – 188

Outside Chaise Steps – – *ib.*

Hanging Steps – – – 189

Price of Steps – – *ib.*

XIV. PAINTING, VARNISHING, &c. 191

Ground Colours – – 192

Picking Out – – – 193

Varnishing – – – *ib.*

Japanning – – – 195

Herald and Ornament Painting – *ib.*

Prices of Painting Bodies and Carriages 200

Prices of Herald and Ornament Painting 201

XV. CHAISE HEADS, WINGS, KNEE-BOOTS, AND DASHING LEATHERS 202

Chaise Heads – – – *ib.*

Wings – – – 204

Knee-Boots or Aprons – – 205

Dashing or Splashing Leathers – 206

Price of Heads, Wings, Knee-Boots and Dashing-Leathers – – 207

XVI. BRACES, POLE-PIECES, &c. 210

Main Braces – – – *ib.*

Collar Braces – – – 211

Check Braces – – *ib.*

Safe

CHAP. Page

Safe Braces - - - 212
Pole Pieces - - - *ib.*
Price of Braces and Pole-Pieces - 213

XVII. TRAVELLING CONVENIENCIES 215

Trunks - - - 216
Inside Straps and Laths - - *ib.*
Trunk Covers - - - 217
Trunk Straps and Belts - - *ib.*
Imperials - - - 218
Cap and Hat-Boxes - - 219
Wells - - - 220
Splinters, or Splinter-Bars - - *ib.*
Drag-Chains and Staff - - 221
Oiled Covers to the Body - - 222
Springs Cording - - *ib.*
Tool Budget - - - 223
Price of Travelling Requisites - 224

XVIII. HANGING OF BODIES - 226

INTRODUCTION.

THE Art of COACHMAKING, within this laſt half century has arrived to a very high degree of perfection, with reſpect both to the beauty, ſtrength, and elegance of the machine: the conſequence has been, an increaſing demand for that comfortable conveyance, which, beſides its common utility, has now, in the higher circles of life, become a diſtinguiſhing mark of the taſte and rank of the proprietor.

The ſuperior excellence of Engliſh workmanſhip, in the conſtruction of carriages, has not only been the occaſion of a very great increaſe in their number among the inhabitants of this country, but the exportation of them to foreign nations, in time of peace, is become a conſiderable and profitable branch of Britiſh commerce.

The coach and coach-harneſs makers, though profeſſions of a very different nature, are yet ſo connected and privileged by each other to follow either or both trades, that more than a third part of the preſent maſter coach-builders are in fact only harneſs-makers, whoſe judgment in the conſtruction of a carriage can go little further than that of a ſhoemaker; yet theſe profeſſors, aided and ſupported by the coachmakers, have always oppoſed, and ſtill continue to oppoſe,

poſe, every other tradeſman concerned in the manufacture of the principal materials of which a carriage is compoſed, ſuch as wheelwrights, ſmiths, painters, carvers, joiners, &c. either of whoſe judgment muſt far exceed that of harneſs-makers; and many of whom poſſeſs a knowledge little inferior to the profeſſed builder himſelf.

But thus united, they ſtrenuouſly oppoſe every new adventurer in the trade, though ever ſo well qualified, if not bred a harneſs or coachmaker, and connected with them in this aſſociation. They (the aſſociators) have been pleaſed to dignify themſelves with the title of *Brights*, and to beſtow upon their rivals the opprobrious epithet of *Blacks*.

This conduct has an evident tendency to a monopoly, and, of conſequence, is a

diſcouragement to the ingenious and enterpriſing tradeſman, whoſe talents might otherwiſe raiſe him to eminence in the profeſſion.

The coachmaker, as is generally underſtood, is no doubt the principal in the buſineſs, being the perſon who makes the wood-work: but there are very few profeſſions wherein a greater number of artiſans are neceſſarily employed; ſuch as thoſe already mentioned, as well as ſeveral others. From the capacity of each of theſe to execute their work in a neat and ſubſtantial manner, the credit of the coachmaker principally ariſes: he ought therefore to be well acquainted with the theory of all the different branches appertaining to coach-building—for without ſuch knowledge, he will prove but a ſuperficial tradeſman.

The

The gentlemen whoſe ſituation in the world enables them to keep carriages, have hitherto been unavoidably deprived of the means of acquiring ſuch a knowledge of the manner of building and repairing them, as would enable them to judge when any attempt is made to impoſe upon them, either in the original price charged for a new carriage, ſuch as their fancy and inclination may lead them to make choice of, or in the neceſſary expence that may be requiſite to repair the damages it may have ſuſtained by time or accident. It is therefore intended to exhibit to public view, ſuch a diſtinct account, not only of the original price of the carriage, and the repairs that may be neceſſary, but alſo of the ſeparate prices of the different component parts thereof, as will enable any perſon effectually to detect or guard againſt impoſition. It is therefore preſumed, that this Treatiſe

will be of equal advantage to the gentleman who builds a carriage, as the Houſe-builder's Price-book has, by experience proved to be to him who builds a houſe; and as there are many more gentlemen who amuſe themſelves in getting carriages built than in building houſes, the utility of this Treatiſe will be more general. For if a gentleman wiſhes to contract with the builder, for a carriage ſuitable to his own taſte, in elegance, beauty, and convenience, he will now, by attending to the prices here given, have it in his power to aſcertain the price he ſhould allow, without the leaſt riſk of being impoſed upon.

It frequently happens, that gentlemen, when they get a new carriage built, or have their old one repaired, are diſappointed both in the appearance and conveniencies

veniencies of it. This ariſes from the orders not being given in terms ſufficiently explicit; an inconvenience that will be effectually removed by the Gloſſary, and an attentive obſervation of the Plates given in this Treatiſe; and the tradeſman can have no excuſe for not excuting his orders agreeable to the directions of his employer.

Another unpleaſant circumſtance, ariſing from gentlemen not being previouſly able to ſtipulate for a certain price, is, that when the bill is preſented, though the prices ſhould be fairly charged, yet they are apt to conceive themſelves impoſed upon, as the amount may exceed what they expected. This frequently occaſions litigations at law; and thoſe who may pay their bills without reſorting to this diſagreeable method, yet retain, though perhaps erroneouſly, an opinion

that the prices are exorbitant; the conſequence is, the tradeſman ſuffers in his reputation, and, perhaps, loſes his cuſtomer.

Carriages frequently get out of repair, from the ignorance or inattention of the coachman, whoſe peculiar province it is to watch over the leaſt injury the carriage may ſuſtain, and, by an immediate application of the proper remedy, to prevent the extraordinary expence that muſt enſue, by ſuffering the injury to remain for any conſiderable ſpace of time unrepaired; beſides, many gentlemen are impoſed upon by the miſrepreſentations of their coachmen, who too commonly attribute the conſequence of their own neglect to the inſufficiency of the carriage.

A practice has been introduced, and for a long time continued, that the gen-

tlemen of the whip receive *douceurs* from the tradeſmen employed in building or repairing of carriages, no doubt with the original intention of encouraging the coachman to take good care of the carriage, and preſerve his intereſt with his employer. It is very likely, the zeal and activity of the coachman will, in a great degree, be proportionate to the encouragement given him: very extravagant expectations are formed by many; which, if not complied with, are ſure to draw the reſentment of the diſappointed coachman upon the tradeſman; and, if complied with, he has no other method of reimburſing himſelf for this very unfair tranſaction, than by charging an exorbitant price for his workmanſhip; ſo that ultimately his employer ſuffers a manifeſt injury.

If the coachman be honeſt, attentive to his maſter's intereſt, and a tolerable judge of his buſineſs, he will diſcover when *any* repair is neceſſary; and, in ſome meaſure, to what extent that repair ought to be carried; but, if ſwayed by ſiniſter motives, and the tradeſman ſhould happen to be of the ſame complexion, a wide field opens for colluſion between the two, and the proprietor is ſure of being egregiouſly impoſed upon; eſpecially, as coachmakers' bills are generally given in technical terms, not underſtood by their employers. However, the Gloſſary annexed will give a full explanation of them, and enable the proprietor to detect any fraud attempted to be put upon him by this colluſion.

It is alſo an important part of the coachman's duty, to be careful in preſerving the ſtrength and beauty of the carriage under

under his care. That his maſter may be enabled to judge whether or not he executes this part of his duty in a proper manner, the time a carriage ſhould laſt, and the expences for repairing it, are aſcertained; and, that it may not proceed from ignorance, particular DIRECTIONS will be given in this Treatiſe, how the preſervatives for the different parts of the carriage are to be applied, ſo as effectually to prevent damage by the ignorance, or impoſition by the artifice, of the coachman; and that, without a gentleman deſcending, in the leaſt degree, to any thing unbecoming his ſituation in life.

This Treatiſe is not intended, nor can it, by any means, injure the fair and honeſt trader, but will rather be of advantage to him, in ſo far as he may charge ſuch prices as are fair and reaſonable, without the

the riſk of ſuſpicion; and his employer will always have it in his power to have recourſe to a regular fair-ſtated price, either for building or repairing. It will, however, prove an effectual check upon the fraudulent and deſigning, by whom the Author expects to be calumniated.

It often happens that tradeſmen, in ſtraitened circumſtances, are induced, for prompt payment, to work upon very low terms, and even, upon urgent occaſions, are tempted to perform work at a loſing price; while others, whoſe circumſtances enable them to give long credit, charge very extravagant prices on that account. A compariſon, therefore, of the different prices charged by two tradeſmen, under theſe circumſtances, might miſlead a ſuperficial obſerver; but a proper attention to the charges that are made, under the circumſtances alluded to, will

enable

enable the proprietor to form a proper judgment, upon the whole, whether he is fairly charged; the length of credit being a material object in varying the charge that must be considered.

There is little doubt but exceptions will be taken to the prices and regulations here laid down, by some tradesmen who may refuse to abide by them; but gentlemen will be relieved from this difficulty, as there are many respectable tradesmen who will be very happy to be employed upon the terms, which are such as will enable them to pay a liberal price to every artificer concerned in the business, and to live respectably themselves; it must necessarily be presumed, that the author is well warranted in his calculations, as it involves his own interest, as well as that of others of the same profession, and who, for prompt payment, can afford

afford a diſcount of five per cent, at leaſt.

It may happen, that deſigning tradeſmen, when they find they can ſo eaſily be detected in any overcharge they make, in order to elude detection, may give other names than thoſe commonly uſed in the Trade (and of which an explanation is given in the Gloſſary annexed) to ſome of the articles charged in their bill; in ſuch caſes, gentlemen may have recourſe to any tradeſman in whom they can confide; or to the Author of this Treatiſe, who will be very happy to receive any commands the public may pleaſe to favour him with.

ERRATA.

Omitted in Page 158.

	Common.			Painted.			Patent.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
Oil-ſkin hammercloth —	1	16	0	2	2	0	3	13	6

A

TREATISE, &c.

ON BUILDING OF CARRIAGES.

THAT carriages ſhould always be built adapted to the different places for which they are deſtined, is a rule invariably neceſſary to be attended to, for town, country, or continent; not, however, to ſuch extremity as to prevent their uſe in either ſituation, but to accommodate them as nearly as poſſible to each, as a much greater ſtreſs is laid upon the carriage in drawing over ſtones and channels, than on a ſmooth road. This makes it abſolutely neceſſary to build ſtronger for the town, than if intended

for the country only, owing to the general goodneſs of our roads: it is alſo neceſſary to build ſtronger for the continent than even for the town, as the badneſs of their roads obliges them to uſe ſix horſes to what, on a well-made road, two would draw with equal facility.

The conſtruction of every carriage ſhould be as light as the nature of the place it is deſtined for, and its neceſſary work, will poſſibly admit; it is folly in the extreme to add a conſtant oppreſſion, by additional weight to the horſes, as the pleaſure of conveyance ariſes from expedition and eaſe, which cannot be effected in a cumberſome, heavy carriage, beſides the unpleaſant ſenſation of toiling the cattle unneceſſarily.

With regard to accelerating the motion of carriages by mechanical powers, nothing new has yet been effected worth much notice. However ſanguine the inventors of thoſe wheel-boxes, for which they have obtained patents, may be, the only advantage, ſuperior to the common, is their containing oil; which will be more fully noticed in its place. A light carriage and fleet horſes exceed every invention of this kind.

A falſe opinion pervades the mind of many people, which is, to build ſtrong, regarding the durability of the carriage in preference to the preſervation of the horſes. Superior ſtrength is effected only by addition in weight of materials; and

and many builders, regardleſs of any thing but their own credit, are ever impoſing heavy durable work, by which they eſtabliſh to themſelves the character of ſubſtantial, good workmen.

The principal merit lies in building as light as poſſible, yet ſo as ſufficiently to ſecure from danger; what a light carriage may loſe by wearing a ſhorter time than a heavy one, is more than compenſated by the preſervation of the cattle. It is alſo reaſonable to ſuppoſe, that the heavier the carriage is, the greater the wear will be on the wheels, and a conſequent loſs thereby.

Although, in the Gloſſary, the technical terms that are made uſe of by the coachmaker are explained, yet this Treatiſe will be much aſſiſted by a deſcriptive repreſentation on plates—1ſt, of the naked framings, or ſkeletons; 2dly, of the materials with which they are finiſhed; 3dly, of the articles for convenience occaſionally uſed; and 4thly, of the carriage in the finiſhed ſtate.

As it would be too prolix to repreſent the great number of carriages that are finiſhed in ſo many different ways, it will be ſufficient to deſcribe two of each ſort, according to the preſent mode that carriages are built—repreſenting, firſt, the timbers, or ſkeleton, thereof, for information concerning the different parts, regulated to a half-inch ſcale, reckoning a half-inch to the foot.

One circumſtance, unleſs particularly noticed, will tend much to perplex in reading this Treatiſe, viz. the meaning and application of the word Carriage. In the uſual meaning of the word among coachmakers, it is the lower ſyſtem, on which the body, containing the paſſengers, is fixed or ſuſpended, and to which the wheels are placed: though, ſpeaking generally of coaches, chariots, phaetons, &c. they are properly called carriages of ſuch deſcriptions; but as the word Carriage will be frequently uſed in both ſenſes, that which partially ſignifies the lower ſyſtem only, will be printed in *Italics*; that in the general meaning of the word, in common letter with the reſt. As all ſorts of carriages are divided into two parts, viz. Bodies and Carriages, they will be treated of ſeparately—beginning, firſt, with the timber-work, which is the entire province of the coachmaker, and on which a great dependence lies, as to the ſufficiency of workmanſhip.

CHAP.

CHAP. I.

ON BODIES IN GENERAL.

THERE are few mechanical ſtructures executed with a greater nicety than this, it being the receptacle of paſſengers. The principal attention of the proprietor is fixed on the proper finiſhing of this part, ſo as beſt to anſwer the purpoſes of convenience and ſhew. The form of ſtructure depends much on fancy; the ſize is proportioned to the intention of its uſe, and regulated by the width of the ſeat and the height of the roof; and the finiſhing executed agreeable to the conditions of contract. Its timbers for the framings ſhould be of a particularly dry aſh, executed with great exactneſs through the whole; the pannels are of a ſoft, ſtraight-grained mahogany, ſmoothed to a fine ſurface, and fitted or fixed in prepared grooves, or bradded on the ſurfaces of the framing; the inſides are well ſecured by glueing, blockings, and canvaſs, to the pannels; the roof and lining, or inner parts, are made of deal boardings.

As no parts of the framing of the body, if well executed, are likely to fail by uſe, a reparation, in conſequence of bruiſes and other accidents, is all that is to be expected. The pannels generally ſuffer moſt injury, either from exceſſive heat, or bad quality of timber; and great attention is required in ſelecting good boards for this purpoſe, which, if not extraordinarily dry, are ſure to fail, by drawing from the grooves, bulging, or cracking, if confined; but though the timbers are good, if the carriage is expoſed to any exceſs of hot weather, it is a great chance but they will fly; but no diſcredit ought to attach to the builder from that circumſtance.

The firſt ſummer a carriage is uſed will prove the ſufficiency of the pannels. So ſoon as they begin to ſtart from the grooves, as they moſtly will in ſome degree, the builder ſhould examine, and relieve them, where confined, to prevent cracking. A little drawing from the grooves is to be expected, and is of no material conſequence; but if they crack, it will always be a viſible flaw.

As ſufficient room in the body makes the ſeats comfortable, it ſhould be the firſt object; and the width of the body ought to be in proportion to the number it is meant to contain. Open bodies have this advantage, that three can ſit with tolerable eaſe on the ſame length of ſeat as would only

only accommodate two in a confined one. A full-ſized ſeat for a cloſe body to contain three, is from four feet to four feet one or two inches; that of an open body, from three feet four, to three feet five or ſix inches. This ſize is ſufficient for two in the cloſe, and from two feet ſeven inches, to two feet eight or ten inches, in the open bodies. The width acroſs the ſeats is never regular, as the ſhape of the body proportions it: but as the uſual ſize of both cloſe and open is from fourteen to eighteen inches, the height of the ſeat from the bottom is, in general, fourteen inches; and from the ſeat upwards, to the roof, from three feet ſix inches, to three feet nine inches; the cuſhions not included.

For the advantage of height, it frequently becomes convenient to make the ſeat moveable. This is only neceſſary to give freedom to extraordinary head-dreſſes. Few people riſe above three feet from the ſeat; ſo that, allowing two inches for the cuſhions, there is left in the clear, without the head dreſs, from four to ſeven inches.

As the intention of its uſe ſhould regulate the ſize of the body, ſo ſhould the ſize of the body the ſtrength and weight of the *carriage*; and it is for want of attention to this particular, that the abſurdity of a heavy *carriage* to a ſmall body, and a light *carriage* to a large one, may be fre-

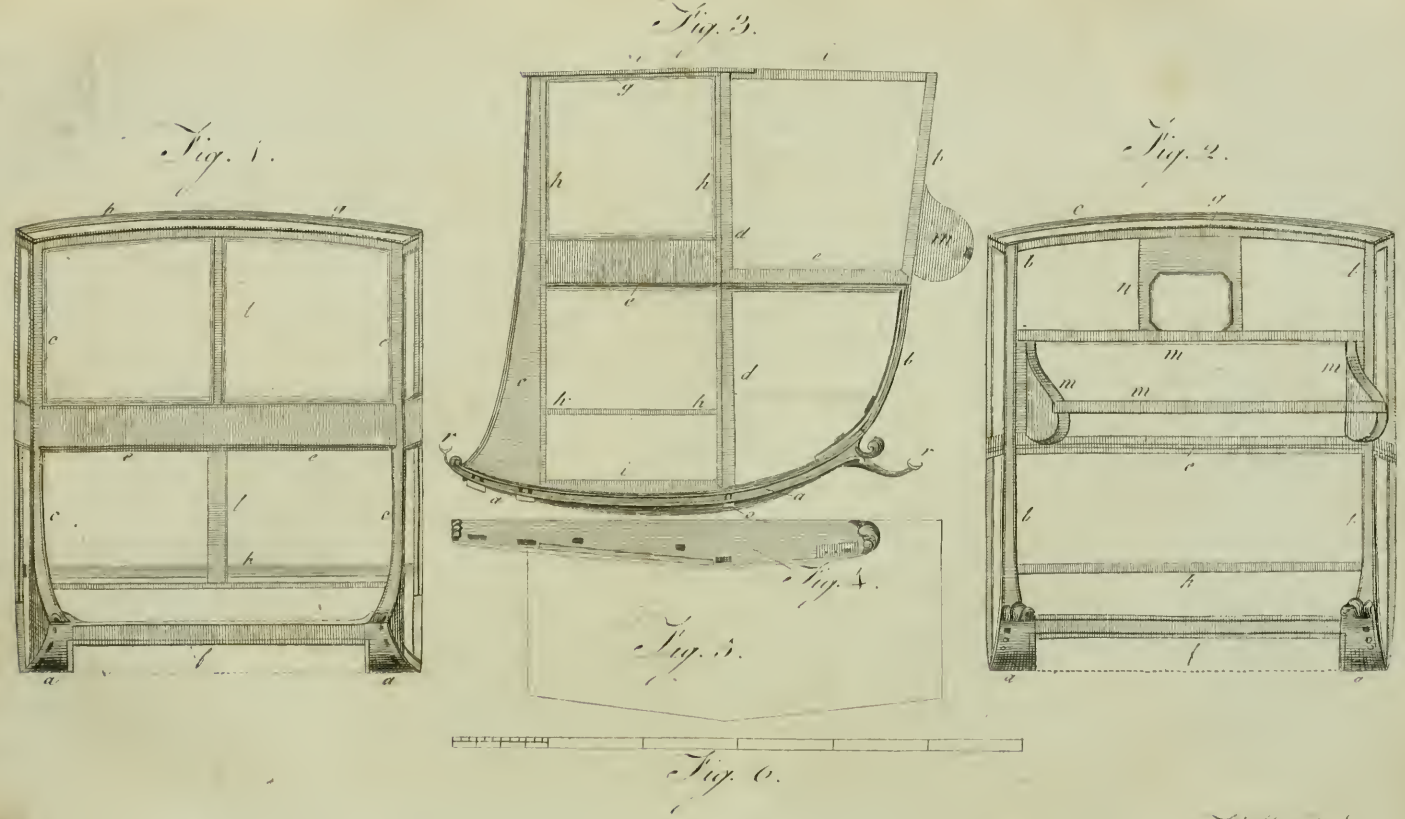
quently obſerved: the conſequence, beſides the appearance, is, that the heavy body ſooner injures the light *carriage*, while, on the other hand, the heavy *carriage* is an unneceſſary incumbrance. In this the builder's judgment muſt regulate him, agreeable to the ſize of the body, which ſhould only be contracted end-ways, by which the ſide view, ſo eſſential to the beauty of the carriage, is preſerved.

SECT. 1.

A CHARIOT OR POST-CHAISE BODY.

THESE bodies differ not in the leaſt from each other. The occaſion for their uſe only alters their name: by the addition of a coach-box to the *carriage* part, they are called Chariots; the poſt-chaiſe being intended for road-work, and the chariot for town uſe. If intended for poſt-work only, the materials are ſomewhat lighter than thoſe of a town carriage; but, when alternately uſed, ſufficiency muſt be obſerved. The width of the ſeat, as before obſerved, regulates the ſize or ſtrength of the body. The framings are not required ſo ſtrong for one or two, as for three perſons. If generally uſed for three, the length of the ſeat ſhould be from four feet to four

Plate I.



H. Wilson Sc.

four feet one or two inches; but if only for a third paſſenger occaſionally, three feet eight inches will be ſufficient, with a ſeat to draw out from the centre. The ſize might be reduced, but the appearance would be hurt by it, as a full body looks beſt.

In this ſort of bodies, a greater width is allowed for the front than for the back of the ſeat, to make it more commodious for the elbows; and the door lights, or windows, are frequently contracted on the ſeat-ſide, that paſſengers may be more ſecure from outward obſervation, and, at the ſame time, have a ſufficient view from within. The advantage of lightneſs, alſo, renders theſe bodies preferable to any other; but the mode of finiſhing them depends more upon fancy than others.

To many of the readers of this work, it may be unneceſſary to give ſuch a deſcription of the method of framing. To others, more curious, and particularly to thoſe of the trade who are not ſufficiently informed, it may prove of no ſmall advantage. As the repreſentations on the plates are drawn to an accurate ſcale, it would be ſuperfluous to mention any thing further of the ſizes. That which has already been given concerning the ſeats, &c. for the inſide, is preſumed ſufficient for general notice. Every part of the framing is diſtinguiſhed by name; and the letters againſt each

each will be a reference to the different deſcriptions afterwards given.

Fig. 1, 2, and 3, are the front, back, and ſide views, ſhewing the joints, and the method of framing the ſeparate timbers, previous to putting in the pannels or boardings.

Fig. 4. is the top, or inſide repreſentation of the main timber or bottom ſide-piece, which likewiſe ſhews the ſide-cant, alſo the grooves and mortices, in which the other timbers are fixed.

Fig. 5, exhibits the angle lines of the body.

Fig. 6, is a half-inch ſcale of the whole repreſentation.

A. The bottom ſide, which is the eſſential or main timber of the whole, as all the reſt principally depend on it. It is of a compaſs make, and forms the bottom line. In it are the ſtanding corner, and fore pillars tenoned, and the ſteps are bolted on the top. The bottom boards are confined hereto by the aſſiſtance of a rocker, which is firmly fixed to the inſide. It is alſo rabbetted from the fore to the ſtanding pillar, for the bottom of the door to lap in, and grooved from the ſtanding to the corner pillars to receive the pannels. The ends are moſtly ornamented with a ſcroll; but ſometimes, according to faſhion, are left equal with the joints, ſhewing no ornament.

B. The corner pillar, is compaſſed on the lower part, and forms the main line or ſweep of the

body. It is ſpliced or tenoned in the bottom ſide, grooved in the ſide and back from the bottom joint to the middle rails to receive the pannels, morticed at the middle and top to receive the middle and quarter-rails, rabbetted between each for the quarter-boardings, or reduced, if meant for pannels, to lap thereon.

C. The fore pillar, is tenoned alſo in the bottom ſide with a double tenon. It entirely ſhapes the front; and, ſideways, it forms a pannel, ten inches at bottom, diminiſhing upwards. The original ſurface is ſunk, leaving a moulding only at the corner: on this pillar the door hangs, where it is rabbetted to keep out the air. The inſide is boxed, or grooved, in ſeparate partitions, for the glaſſes, ſhutters, &c. to ſlide in; morticed in the middle and top for the front top and middle rails, and grooved in front for the pannels.

D. The ſtanding, or perpendicular pillar, tenoned in the bottom ſide and top rails, is one of the main pillars of the body for ſtrength. It ſupports the roof in the middle, is rabbetted on the inſide for the ſhutting ſide of the door, reduced at the lower part for the ſide or quarter pannels to lap on, which are fixed by bradding thereto. The upper part from the middle is prepared the ſame way as the upper part of the corner pillars; and in this the ſeat-rails are alſo tenoned.

E. The

E. The middle rails, which divide the pannels from the upper quarters, are grooved on the bottom edge to receive the pannels, and rabbetted on the top for the boarding or pannels. They are diſtinguiſhed by the ſituation in which they are placed; thoſe on the ſide, by elbow rails; thoſe in the doors, by middle door rails; and thoſe in the front and back, by back and front rails: the elbow rails only are lapped, and that in the ſtanding pillars; the others are all tenoned in the different pillars. Thoſe rails which form the bottom of the light, or windows, have a ſmall fence reſerved behind, over which the glaſſes, &c. are placed when up, and prevents water from paſſing into the grooves: they are alſo left broad, and ſunk from the original ſurface, leaving a moulding on the top and bottom of the outer edges, forming a diſtinct pannel, on which moſtly the creſts are painted; theſe are frequently called door-ſtyles.

F. The two bottom bars, are the moſt eſſential end-framings, and are tenoned in the ends and the bottom ſides; the hind one is rabbetted on the top edge, to receive the pannel, which is ſecured to it by a batten nailed on the inſide; the bottom is grooved to receive the boardings, which alſo are nailed to it; it divides the pannel from the bottom, and is moulded on the outſide. The

fore

fore bar is left level with the bottom furface of the groove in the fore pillar, that the pannel may be bradded on it; a moulding, or batten, is put upon the pannel, fo as to form or imitate the reft of the framings; the bottom is rabbetted for the boardings, which are alfo nailed therein.

G. The roof-rails are compaffed to the intended fhape of the roof, and are denominated as follows: thofe on the fides are called top quarter-rails, which are tenoned in the corner and ftanding pillars, rabbetted alfo on the bottom edges for the boarding or pannels; the door-cafe rails are what form the top cafing to the door, morticed on the ftanding pillars, and its whole fubftance lapped fome length on the quarter-rails, to which they are ftrongly fcrewed. The back and front roof-rails are properly fo called: the back-rail is tenoned in the corner pillars, and rabbetted at the bottom edge for the boardings or pannel; the rabbet in the middle is funk deeper, to receive the board for the octagon or back light, which is made therein. The front roof-rail is tenoned in the fore pillars, and is a framing for the light, the middle of which is deeply grooved out from the bottom, which receives the top of the glafs frames and fhutters when put up; this, with the door-cafe rails, has cornice-pieces nailed on, after the leather on the roof is fixed, which conveys the water from the lights or windows.

H. The

H. The door pillars, of a ſeparate framing from the body, morticed at the two ends and middle for the rails; the one ſide is grooved in ſeparate partitions, for the glaſſes and ſhutters to ſlide in; the other ſide is rabbetted, to anſwer the rabbets of the ſtanding pillars, as they ſhut in each other, and, thus formed, exclude both water and air; the outſides, from the bottom of the middle rails downwards, are reduced to the thickneſs of the moulding and pannel, the ſame as the ſtanding pillars, as upon the door pillars the pannel is fixed, and a braſs plate is ſcrewed to the ſide of each with a double rabbet; the one laps on the door pannel, the other on the quarter pannel, and riſes a little above their ſurface; thoſe pillars are hung with three braſs or iron hinges on the fore pillars, and have a box-lock fixed on the oppoſite pillar, which bolts in the ſtanding pillar; the inſides of the door pillars are rabbetted to receive the boardings, which form a caſe for the glaſſes, &c.

I. The door top and bottom rails, are tenoned in the door pillars; the top rail, with the addition of an inſide piece, forms a top groove for the glaſs, &c.; the bottom is framed level with the reduced ſurface of the door pillar, for the pannel to brad againſt; it is fitted in the large rabbet of the bottom ſide; and on the bottom is

fixed

fixed a ſingle rabbetted plate, which laps upon, and preſerves the pannels.

K. The fore and back ſeat-rails; the fore ſeat-rail is tenoned in the ſtanding pillars; the back one is lapped, and ſcrewed on the corner pillar, on a level with each other; on theſe the boards are nailed which form the ſeat.

L. The front or middle pillar, lapped and ſcrewed on the middle and top rails, and is grooved the ſame way as the ſide of the fore pillars, with partitions for the glaſſes, &c.

M. The ſword-caſe, ſo called from its length and convenience for carrying ſwords or ſticks, and, on account of its prominence from the back, is ſometimes called a boodge; the ends are made of thick boards, ſhaped as deſcribed, and ſcrewed on the ſides of the corner pillars: on the upper part is a rail fixed in the back of the corner pillars, for the boarding to nail againſt; to which alſo the octagon-piece is fixed: a rail or batten croſſes the two projections, to ſtrengthen the board on the bend.

N. The back-light piece, which is a thick board, out of which the back-light is formed in a ſquare, an octagon, or oval-ſhape, which is rabbetted for the glaſs, and, on the edges, for the boards, ſcrewed in the two uppermoſt rails.

O. The rockers, are two ſtrong boards firmly ſcrewed or nailed to the inner part of the bottom

tom ſide piece, from which it deſcends fartheſt in the middle, and the deſcent gradually diminiſhes to both the extremities: on the bottom of theſe rockers the bottom boards are nailed; their uſe is to give depth from the ſeat, without affecting the external appearance of the body.

P. The compaſs-rails, called hoop-ſticks, five or ſix in number, ſhaped to the intended form of the roof, and ſcrewed on the top of the ſide roof-rails; on theſe the roof-boards are nailed.

Q. The reſt-piece for the glaſſes, on which they fall when let down; they are ſcrewed at the bottom of the grooves, and againſt which the lining-boards are nailed.

R. The body-loops, which are of iron-work, are fixed on the bottom ſide-ends with bolts or ſcrews, by which the whole body is ſupported by the braces.

This is the complete frame-work of a chariot or poſt-chaiſe body. The following deſcription is of the body complete, with its pannels and boardings; but as the upper parts are variouſly finiſhed, it will be neceſſary to make ſome obſervations on the difference.

The upper parts, except the roofs, are generally called upper quarters, that is, ſide and back quarters. The uſual mode of finiſhing theſe, is by filling the vacancy with deal boardings, firmly battened

battened on the inſide, and covering the ſurface with leather, tightly ſtrained on, and nailed at the inſide edges; over which a moulding goes, and is ſewed at the outſide edges, making a welt, or is nailed in a prepared rabbet, and covered alſo with mouldings. Other quarters have the vacancy, the pillars, and rails, covered with a pannel or mahogany board, finely ſmoothed on the outſide. The leathered ſurface is the moſt ſecure: the pannel ſurface looks the beſt; but the brads, with which they are confined, and the other nailings of the head-plates, mouldings, &c. occaſion them frequently to ſplit.

The ſword-caſe is prepared in the ſame manner as the quarters, either with a leather or mahogany ſurface.

As the preſent is an improved method of putting in the lower ſide pannels in a rounded form, they are thus repreſented. It adds conſiderably to the fullneſs of the ſide, and exhibits the painting thereon to a much greater advantage: this is done by the door and ſtanding pillars being left full on the outſides, and reduced by rounding them towards the bottom.

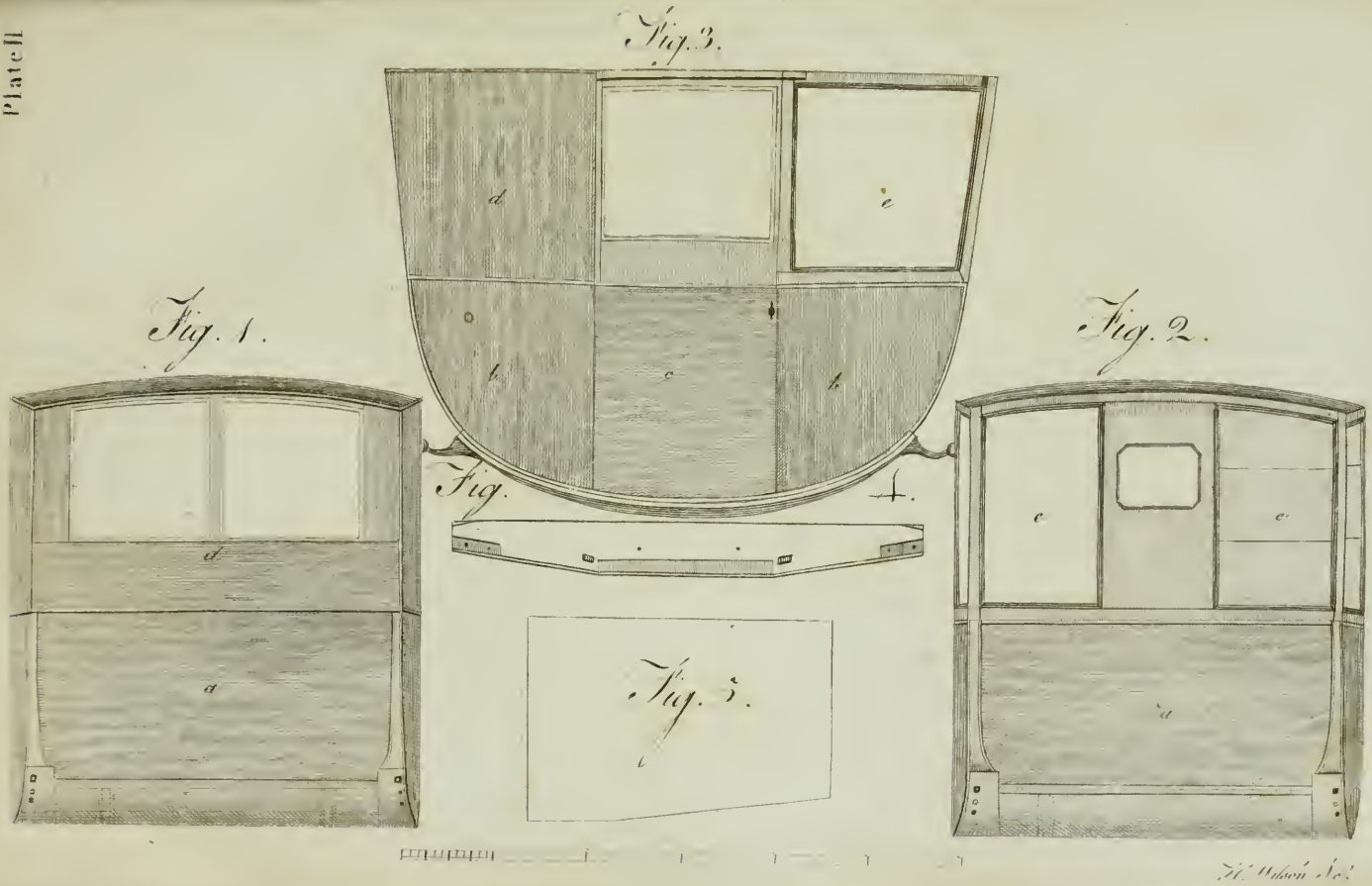
The inſide work, where the glaſſes are contained in the front and doors, is only lined or caſed with boardings, and nailed in rabbets on thoſe pillars which form the lights or windows: the other inſide work is battening, blocking, and

glueing of canvaſs, along the edges, and acroſs the grain of the pannels, which glueing very much preſerves and ſtrengthens them. The blocking is alſo a material aſſiſtance to the ſtrength, which is done by a half-ſquare, cut acroſs, or angle-ways, cutting it alſo in ſhort lengths, and glueing the ſquare ſides againſt the pannel and its framing.

The battens are long, thin pieces of board, placed acroſs the grain of the wood, bradded, or ſecured by blocks, or canvaſs, in order to ſtrengthen or ſupport thoſe parts to which they are applied.

The inſide work, after being thus finiſhed, ſhould be immediately painted all over, except the ſeats, and in particular the door and front pannels, before the lining-boards are fixed in, ſo as to expoſe no timber to the air uncovered with paint, as the air materially affects it, particularly the wide boards, or pannels, as they ſwell in wet, and ſhrink in dry, ſeaſons: a proper attention, in this particular, is indiſpenſably neceſſary.

Plate II



SECT. 2.

ON COACH BODIES.

THE accommodation in this body makes it more convenient for large families, being, for the moſt part, capable of holding ſix perſons occaſionally; but as the ſize of the body affects the weight of the whole machine, the proprietor has only to proportion it to the number he wiſhes it to contain; the difference of this from the chariot is only in the length, by the addition of a ſeat ſide; and as every part of the framing bears the ſame name in both, it is unneceſſary to repeat it, but only to obſerve, that the coach has no fore pillar as the chariot has.

PLATE II.

Fig. 1, 2, and 3, ſhew the two ends, or front and back, and the ſide view of a coach or chariot body, with its pannels, or boardings, in the framing, and the uſual method of placing the grain of the wood. The lower pannels are all fixed in grooves; the upper pannels, or boardings, are bradded on the flat ſurface, or in pre-

pared rabbets: the ſword-caſe, being an addition depending on choice only, is omitted in this repreſentation, for the purpoſe of ſhewing the different methods of framing.

Fig. 1, is the fore end, ſhewing the method of pannelling the quarters; and

Fig. 2, the hind parts of the body, ſhewing the method of boarding the quarters. The one ſide of the back is left with the vacancy, on purpoſe to ſhew the rabbets for the boardings; and the other ſide repreſented with the boardings nailed in the rabbets.

Fig. 3, is the ſide view, ſhewing the upper quarters, the one end boarded, and the other pannelled.

Fig. 4, is the top view of the bottom ſide-piece, ſhewing the mortices for the ſtanding pillars, the rabbet for the door bottom and the end grooves, wherein the corner pillars are ſpliced.

Fig. 5, is the half angle of the ſide, ſhewing one-fourth of the ſize within the body, divided at half the extent of the ſide and ends.

A. The two end pannels, which are diſtinguiſhed into back and fore; the grain of the wood they are compoſed of is placed length-ways, and is bent by a proceſs of heating by fire.

B. The quarter pannels, fixed in the grooves of the bottom ſide corner-pillars and elbow rail, and bradded on the ſtanding pillars.

C. The

C. The door pannels, fixed in the grooves of the middle door rails, or ſtyles, bradded on the door pillars and door bottom; on which alſo ſmall braſs mouldings are lapped, which ſcrew on to the ſides and bottom of the door.

D. The upper pannels, bradded on to the upper parts of the corner and ſtanding pillars, and to the elbow and top quarter rails, which are rabbetted down to the ſubſtance of the pannel, within about half an inch of the outer edges; the mouldings are afterwards fixed over the joints.

E. The upper quarters, boarded for the purpoſe of being covered with leather: the pillars and rails are rabbetted about half an inch on the inſide edges, for the deal boards to be nailed in.

F. The bottom, which is of ſtrong deal boarding, nailed acroſs to the rockers, and are tongued in each other to exclude the air.

G. The battens, made of wood or thin iron plates, which croſs the boards, and are nailed alſo to the two bottom bars.

H. The roof boardings, which are of thin deals, nailed the long way of the body, and acroſs the hoop-ſticks, to which they are alſo nailed, and prepared ſmooth for the leather.

SECT. 3.

LANDAU, OR LANDAULET, BODIES.

THESE kinds of bodies differ nothing in ſhape from thoſe laſt mentioned. The landau is the coach, the landaulet the chariot form; ſo called from the method of opening at the top, which gives the advantage of air and view to the paſſengers. The top of the whole, from the middle, throws open at pleaſure.

Theſe bodies not being aſſiſted by the connected ſtrength of the upper framings, it becomes neceſſary to make the lower parts of ſtronger materials, and even to be aſſiſted with ſtrong iron-work, which ſo increaſes their weight as to make them objectionable; and this, together with their expence, has almoſt annihilated the uſe of them.

The upper parts of theſe bodies loſe much of their appearance, in compariſon with thoſe of fixed roofs, as they are covered with looſe, oiled leather; that cannot be japanned, and, by being expoſed to the weather, contract, and look ill, after being a little time in uſe; and, now that almoſt every gentleman is maſter of the whip, other open carriages are ſubſtituted in their place. Many perſons, however, are yet partial

Plate 30.

Fig. 1.

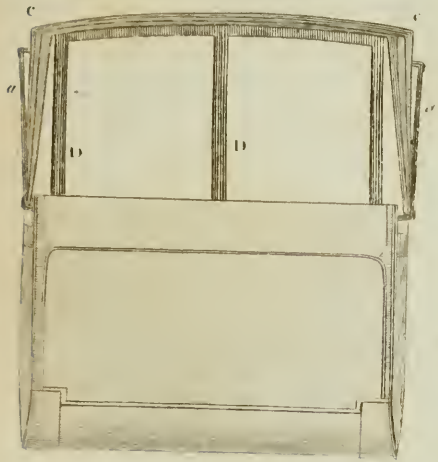


Fig. 3.

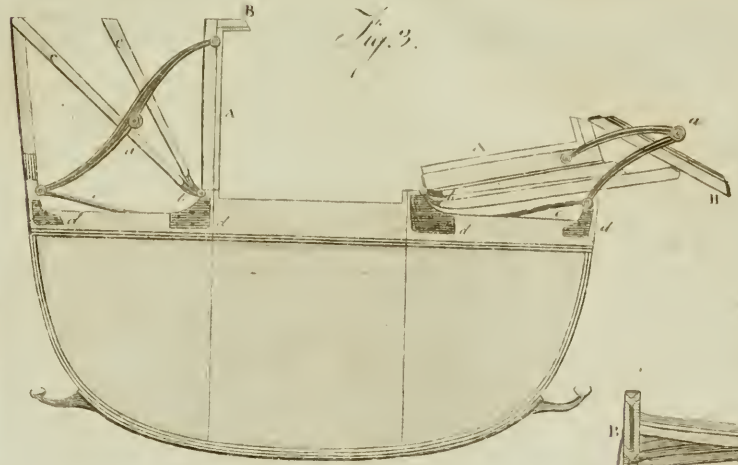
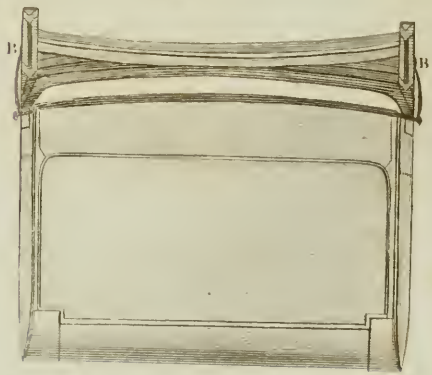


Fig. 2.



H. Wilson Sc.

partial to thoſe carriages; for the information of whom, therefore, an exact repreſentation of them is here exhibited. The difference, except in the additional ſtrength of timbers, is only from the middle rails upward, to which height the doors only open; but as miſtakes might frequently happen by attempting to open the doors with the glaſs or ſhutters up, it is uſual to add a ſpring-bolt on that ſide of the door which ſhuts: ſo that when either the glaſs or ſhutter is up, it cannot poſſibly be opened.

PLATE III.

LANDAU BODY.

Fig. 1, 2, and 3, the front, ſide, and back views of a landau; the front part ſhewing the head when fixed, and the back ſhewing it when down, with the iron-work on, and the uſual method of framing theſe ſorts of bodies. The wood-work is deſcribed on the plates by capitals, the iron-work by ſmall letters.

A. The ſtanding pillar, which, above the joint, forms the door and ſtanding pillar in one ſolid piece, and framed in the top rails, to which the fixture for the joint at the top is made faſt.

B. The door-cafe and door-top rails, imitated in one piece: it is ftrongly framed to the ftanding pillar, and divided in two places; between them the joints towards the front are fecured with a double angle, fo that, when fhut, they fhall not fhift from each other.

C. The expanding timbers, or hoops, which fupport the leather, are fixed to the neck-plates, and fupported by a ftrong Manchefter tape, called web: the front and back hoop-fticks are formed of the front and back top-rails: there are four hoop-fticks to the middle, or over the door-lights, fixed on the top-rails, two of which unite at the opening joints, on which the faftener are fixed, to confine the head when up.

D. The front-light pillars, which fall with the reft of the fore-end, jointed as defcribed.

a. The iron-joints, which are moftly plated with filver, and fixed on props.

b. The neck-plates, by which the head is fixed up or let down, firmly fcrewed to the flats, and by which the hoops expand.

c. The ftay, which ftrengthens the fide of the body againft the ftrain of the joint.

d. The plates fixed acrofs the joints of the elbow-rails and pillars, to ftrengthem them.

Fig. 2.

Fig. 4.

Fig. 1.

Fig. 3.

LANDAULET, OR DEMI-LANDAU BODY.

THE difference of this body from that of the landau is very ſimple: it has no diviſion on the roof, but opens all from the fore part, and throws down behind; whereas the other has two, and opens nearly in the middle of the roof. The uſual method of opening theſe landaulet bodies, is to throw up the roof from the front, and to turn it backwards, throwing the front part forwards; but in this caſe, the lamps muſt always be taken off, and laid by.

A better method is to fix the joint on the top, inſtead of the middle of the fore pillar, and to turn it up on the inſide of the top-caſe rails, which it turns back upon, and falls with the roof, preſerving the lamps undiſturbed, as repreſented in the plate. The deſcription the former chapter explains what further is neceſſary to be known in this, which, aſſiſted by the following repreſentation, will prove ſufficient information concerning the demi-landau.

PLATE IV.

Four views of the demi-landau, being an addition of a back, which it repreſents when up, and

and which alſo ſerves for the landau back, the former plate only ſhewing the back when down.

Fig. 1, The ſide view, ſhewing the method by which the roof is turned back, with the lamps on.

Fig. 2, The back, with a fixed top.

Fig. 3, The back, with the top ſtruck down.

Fig. 4, The front, when the top is ſtruck back, with the middle pillars, or partition-piece, turned on the front, which is prevented from touching the pannel by the knuckle of the hinge.

CHAP.

CHAP. II.

PHAETON, CURRICLE, OR CHAISE BODIES.

THESE bodies have a great variety of forms, and are diſtinguiſhed by their ſhape, of which the principal are, the ſtep-piece, the tub-bottom, the chair-back, or the half-pannelled bodies: and the *carriage*, with which they are reſpectively connected, is called partly by their names, ſuch as the ſtep-piece phaeton, the tub-bottom chaiſe, the chair-back curricle, or the half-pannel whiſkey carriage, &c.

In theſe open bodies, no one general rule is obſerved in building, they being moſtly formed to the fancy of the proprietor. Thoſe intended for one-horſe carriages are, for the moſt part, light; the length of the ſeat is generally adapted for two perſons only: thoſe for two-horſe carriages are generally built of ſomewhat ſtronger timbers, and are more roomy.—The method of hanging theſe bodies depends much on fancy, or a conception of eaſe; and ſome bodies are not hung at all, but fixed on the ſhafts of their *carriage*, depending

ing entirely for their eaſe on the ſprings which are fixed underneath.

Heads to thoſe open bodies are exceedingly convenient in this changeable climate. Some are permanently fixed, and others are made to take off occaſionally: but the addition to their weight, and the expence of the heads, frequently render them objectionable, particularly to the very light ſort of carriages; in phaetons or curricles, however, drawn by two horſes, the objection of weight is done away by the ſufficient power of draught.

It would be ſuperfluous here to repreſent, in the ſkeleton framing, the great variety of theſe kinds of bodies. Their different forms are all repreſented in their finiſhed ſtate in the ſecond volume of this work; and as there is a great ſimilarity in the method of framing them, a repreſentation of two, in which the greateſt difference lies, will be ſufficient for the whole—the one, a chair-back body, for gig or curricle, which hangs by braces—the other, a ſimple, half-pannel whiſkey, which fixes on the ſhafts. The former is repreſented with a head, and the latter with wings only: the head is alſo repreſented in the two ſhapes in which they are uſed, viz. the ſquare, and the round, or waggon-top form.

The framing, the pannels, and the inſide work, are all prepared and fixed to each other in nearly the ſame manner as the bodies laſt deſcribed, only

only leſs, and differently ſhaped: the ſeparate parts of the framing are alſo called by the ſame name, agreeable to their ſituations.

SECT. 1.

THE GIG BODY.

THIS kind of body is principally uſed on a curricle or handſome chaiſe *carriage*. The hind loops are fixed through the middle back of the corner pillars, by which it hangs: the method of hanging at the fore part varies, according to the fancy of the builder, or the ſituation of the body. The ſide pannels may entirely fill the ſpace between the two pillars; but, agreeable to the preſent mode of building, the ſide is divided at the ſtanding pillar by a door, or an imitation thereof, preſerving the ſame ſhape; but, in either caſe, whether ſham or real door, it projects above the ſurface of the pannel. The ſize of the body varies according to the purpoſes for which it is intended, but, in general, meaſures from two feet ten inches to three feet two inches on the ſeat.

PLATE V.

Fig. 1, 2, and 3, The front, back, and ſide view of a gig body, in the framing only.

A. The bottom ſide, in which is framed the pillars and brackets.

B. The corner pillars, left with a ſwell to ſtrengthen and ſupport the loop by which the body hangs, tenoned in the top or elbow rails, and bottom ſide.

C. The fore pillar, tenoned in the bottom ſide, and lapped in the elbow rails.

D. The ſtanding pillar, tenoned in the bottom ſide and elbow rails.

E. The elbow rails, morticed on the corner and ſtanding pillar, and lapped on the fore pillar; on theſe rails the wings and head are fixed to the ſide.

F. The back rail, tenoned in the corner pillar, and lapped on the elbow rail, to which it is ſcrewed: on this the pannel brads, and the back of the head is fixed.

G. The front and back ſeat rails, ſcrewed on the corner pillar, and tenoned in the ſtanding pillar.

H. The bottom bars, tenoned in the bottom ſide: the pannel brads on the hind one, and the foot-board laps on the fore one, to which it is ſcrewed.

I. The

Plate V.

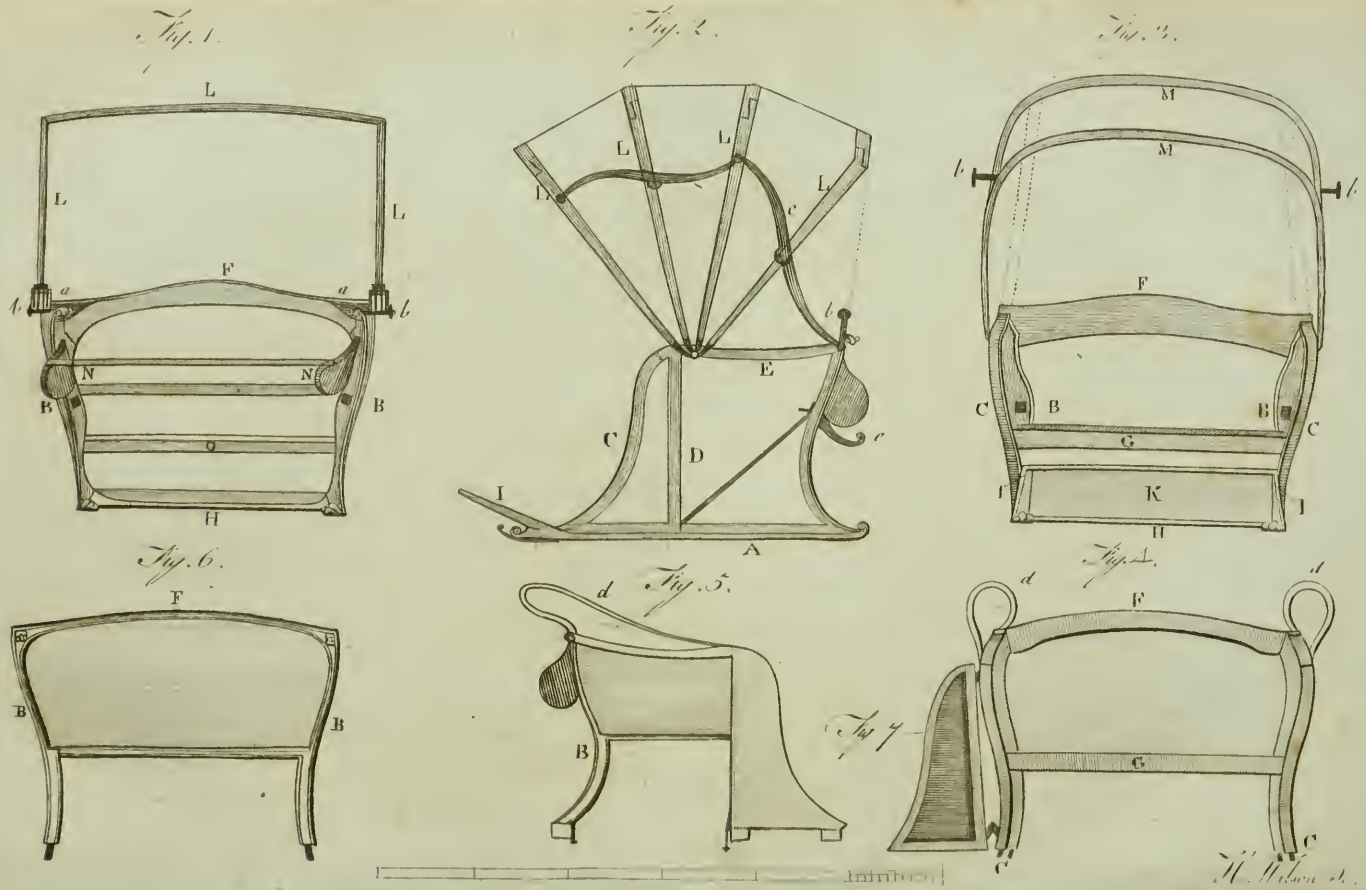


Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.
Fig. 5.
Fig. 6.
Fig. 7.
L
F
a
b
N
B
O
H
c
E
C
D
I
A
M
G
K
d
H. Wilson sc.

I. The brackets, tenoned in the ends of the bottom ſides: their uſe is to ſupport the foot-board, in which it is grooved, and ſcrewed from the outſide.

K. The foot-board, fixed in the brackets and on the bottom bar.

L. The ſlats and hoop-ſticks, or the timber-work for a ſquare head to ſupport the leather. The ſide-pieces are called ſlats, which are ſeparated and fixed by iron-work, and hung on a centre pin, or bolt, to the elbow-rails. The top or roof pieces are called hoop-ſticks, which are lapped, nailed, and ſecurely canvaſſed to the ſlats, and are placed at proper diſtances from each other, by means of ſtrong Mancheſter tape, called girth-webbing, which is nailed to the back rails and to each hoop-ſtick. On the outſides of the front and third ſlat, the fixtures or props for the joints are ſcrewed, by means of which the head is put up or let down.

M. The round or waggon-ſhaped head, the hoop-ſticks and ſlats of which are more curved, are lapped in each other, ſcrewed, and canvaſſed firmly together: their uſe and manner of operation is exactly the ſame as the ſquare heads, of which this, at preſent, takes the precedence in point of faſhion.

N. The ſword-caſe, made the ſame as the one deſcribed in Plate 1.

SECT.

SECT. 2.

HALF-PANNEL OR WHISKEY BODIES.

HALF-pannel bodies are frequently of the ſame ſhape as the whole, only the pannels terminate at the ſeat rail. Lightneſs in the appearance is the reaſon for making bodies in this manner, which is ſeldom made to thoſe of any other ſhape but that of the tub-bottom. The only difference in theſe bodies, is their having middle rails framed in the pillars for the pannels to be fixed into, and from the middle rails are open; the bottom-ſides, the hind-bar, and pillars, from the middle, are moulded all round, to lighten their appearance.

The common half pannel bodies are thoſe framed on the ſhafts or timbers of the *carriage*, and have no bottom-ſides or foot-board thereto, the foot-boards being fixed to the ſame timbers or ſhafts as the body, and are ſimply framed, as deſcribed in Plate 5, Fig. 4, 5, and 6, being the front, back, and ſide views of a half-pannel whiſkey, or chair, with the pannels in the framings, and without a ſword-caſe.

If any of thoſe bodies are made with real doors to open, the fore pillars are not framed to the elbow-rail or bottom-ſide, but to an additional ſide-

piece, which hangs by hinges upon the ſtanding pillar, having a piece framed acroſs the bottom, with a ſmall pannel bradded thereon, the ſurface of which projects above the other pannel, and is japanned in the ſame manner as the quarter or upper parts of a coach. When theſe doors are uſed, the bottom ſide, from the ſtanding pillar, muſt be plated with iron, to afford the neceſſary ſupport to the fore pillar.

Fig. 7. A real door, hung to the whiſkey body, the vacancy on the outſide being covered with pannel or leather. The iron-work is marked with ſmall letters, with the intention of ſhewing the method of fixing it.

a. The iron frame, on which a head is made, when intended to be taken off occaſionally, having the props for the joints and ſlats thereon.

b. The props for the joints, on which they are ſcrewed.

c. The joints, by which the head is ſet up or let down at pleaſure.

d. The wings, being iron frames, which are covered with ſtrong leather when a head is not uſed.

e. The body-loop, which is bolted through the framing, having an iron ſtay in the inſide, to ſupport or preſerve the ſtrength of the pillar, when the body hangs in this manner.

SECT. 3.

THE VALUE OF BODIES,

IN THEIR NAKED STATE.

TO aſcertain the value of bodies and *carriages* ſeparately, in their unfiniſhed ſtate, may, by ſome, be condemned as an injuſtice to the trade, and unprofitable to the public; as it may appear that thoſe perſons to whom this ſubject is addreſſed, would be ſufficiently informed, if the value and deſcription of the various carriages only, with their additional requiſites in their completed ſtate, were to be publiſhed. This is certainly all that many would deſire, but it would not convey a ſufficient information to thoſe gentlemen who chuſe to ſpeculate in building their own way; and as impartiality between the public and the trade ought to be regarded, no information ſhould be withheld.

The profits to the trade are here proportioned in the ſame manner as every other article in the Treatiſe, and no diſadvantage can be complained of, except that of making the public too well acquainted. One material circumſtance, in vindication of the neceſſity of inſerting the prices, is the occaſion ſome gentlemen have to change the body, or *carriage* part, of that which they immediately

mediately occupy, for one of a different ſhape, or to ſupply the place of an old one; and as the various methods of finiſhing every ſort are added progreſſively in this Treatiſe, the expence of ſuch alterations, any way completed, may be more eaſily aſcertained.

As the ſtuffing on the inſide of bodies, and the covering with leather on the outſide, are not to be mentioned hereafter; that matter, with the neceſſary iron-work, ſuch as loops, locks, hinges, handles, and door-plates, alſo the value of carving them, will be included in the price ſtated for each. When thus far finiſhed, it will be conſidered as a rule to proceed by, and every other article, ſuch as lining, painting, and plating, will be added. Whether the quarters and ſword-caſe, either of coach or chariot, are covered with leather, or made of mahogany only, it makes no material difference in the expence, but thoſe generally prove the beſt that are covered with leather.

	£	s.	d.
A chariot body made plain, covered with leather on the roof and quarters, ſtuffed or prepared on the inſide for the lining; the carving and neceſſary iron-work included, as before mentioned —— —— ——	25	0	0
The door-lights contracted on the ſides ——	2	0	0
The body made with round ſides, agreeable to the preſent faſhion —— ——	1	0	0

	£.	s.	d.
A coach body, plain leathered on the outside, and ſtuffed on the inſide, the carving and iron-work included	30	0	0
Round ſides to ditto, extra	2	0	0
A ſword-caſe to either coach or chariot	2	10	0

When carriages are built for hot countries, the bodies are moſtly made with lights or windows in the ſides and back, to contain blinds and glaſſes, in the ſame manner as when they are placed in the door or front, which increaſes the price of building as follows:

	£.	s.	d.
A pair of ſide-lights to either	3	10	0
A large back light	2	0	0
Ditto, divided	2	15	0

The landau or demi-landau cannot have any of the extras mentioned in the coach or chariot, except the round ſides. Though none of the bodies are repreſented in the plates with the leather on, its value in this, as in the laſt, is included with the wood, iron-work, and carving; and the inſide is alſo prepared for the lining, &c. —The extra quantity of workmanſhip, the increaſe of iron-work, and difference of leather and putting it on, make the material difference in the price of thoſe bodies from the others. The only difference beſides, which is but trifling, is in the trimming or putting in the lining, and which is hereafter particularly noticed

A landau

	£.	s.	d.
A landau body, with the leather, and iron-work, or the inſide ſtuffing, &c. thereto	46	0	0
A landaulet, or demi-landau body, as above	40	0	0

The round ſides the ſame as formerly ſtated.

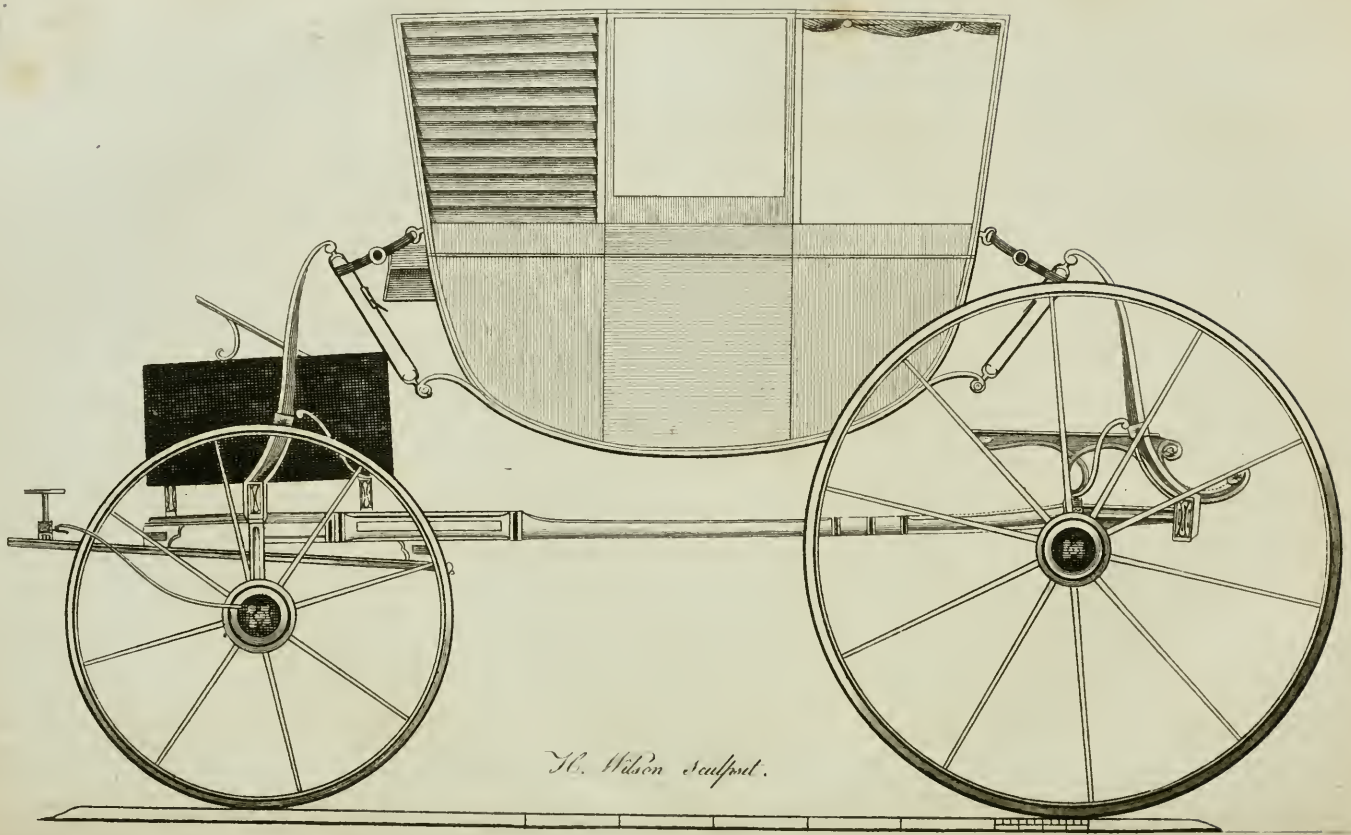
Chaiſe bodies, being of many different forms, their prices are likewiſe various; but, owing to their general ſimplicity, the difference in their prices is not material. The principal extras, which may be added or omitted to any, are the doors and the ſword-caſes. The heads, knee-flaps, and wings, are not included in the prices, but are only repreſented, to ſhew the method of making the wood and fixing the iron-work, but are hereafter ſtated and fully explained under ſeparate heads.

The expence of caning, and that of pannelling, the half-formed bodies, is the ſame in either. The difference principally lies in the painting or lining, which is afterwards mentioned: the following articles are included in the prices here ſtated, viz. all the neceſſary iron-work, ſuch as loops and ſtays; the inſides prepared for the lining, and the framings moulded the ſame as on the other bodies. No leather is wanting, except to the ſword-caſe, and the real or ſham doors, which, like the quarters of a coach, may be either leathered or pannelled. This being conſidered a rule, the different methods of finiſhing may be

known, by referring to the ſeparate chapters on lining, painting, plating, heads, wings, knee-flaps, &c.

	£.	s.	d.
A ſtep-piece, or half-ſhaped body — —	8	10	0
A gig body, which hangs from the pillars —	7	0	0
A common bell, or tub-bottom ſhaped chaiſe, which hangs from the bottom corners —	6	10	0
A graſhopper or three quarter pannel chaiſe body	6	6	0
A whiſkey or chair body — ——	5	5	0
Doors to open on the ſides to either of thoſe bodies	2	0	0
Sham doors to the ſides of either — —	0	15	0
A ſword-caſe, or boodge, to any of them —	1	10	0
A drop ſeat-box to any of the half-pannel bodies, fixed on the ſeat-rail —— ——	0	7	6

CHAP.


H. Wilson Sculpt.

CHAP. III.

FOUR-WHEELED *CARRIAGES.*

THOUGH, as before obſerved, by the term *Carriage* is generally underſtood a carriage complete, yet its meaning is frequently confined to the under part only, on which the body is placed. It is the *carriage* which bears the ſtreſs of the whole machine, and much depends on its ſufficiency. It ſhould be well proportioned in its ſtrength, according to the weight it is meant to ſupport, always allowing rather an over proportion, than running the riſk of accidents. A proper application of the iron-work, to ſupport the preſſure, is a material thing to be attended to; and great care ſhould be taken that no flaws be permitted to paſs. The timbers, which are of aſh, ſhould be of young trees of the ſtrongeſt kind, free from all kinds of knots, and perfectly ſeaſoned before uſed; and, as many parts of the framing are obliged to be curved, it is beſt to ſelect ſuch timbers as are grown to the ſhape.

The workmanſhip of a *carriage* muſt be particularly firm, and not partially ſtrained in any part, as it is to bear much racking in its uſe. The timbers throughout are lightened or reduced, for the ſake of external appearance, aſſiſted alſo with moulding edges, and carving in ſome ſmall degree, which greatly helps to ornament the whole.

All four-wheeled *carriages* are divided into two parts—the upper and under *carriage*. The upper is the main one, on which the body is hung; the under *carriage* is the conductor, and turns by means of a lever, called a pole, acting on a centre pin, called a perch-bolt. The hind wheels are placed on the upper part; the fore wheels on the under.

There are two ſorts of four-wheeled *carriages* —the perch and crane-neck, in which there is a material difference in the building and properties: but this does not affect the bodies, as they will hang equally on either. The perch *carriage* is of the moſt ſimple conſtruction, and conſiderably lighter than the crane-neck; and as the width of the ſtreets in this metropolis gives every advantage to their uſe in turning, they are the moſt general. The crane-neck *carriage* has much the ſuperiority for convenience and elegance, and every grand or ſtate equipage is this way built; but the weight of the cranes, and the additional

additional ſtrength of materials neceſſary for their ſupport, make them conſiderably heavier than the others; but their eaſe and ſafety in turning in narrow, confined places, and alſo their ſtrength, render them indiſpenſably neceſſary for foreign countries.

The track in which the wheels of every *carriage* are to run, is generally the ſame, except when intended for particular roads, where waggons and other heavy carriages are principally uſed; they leave very deep ruts, in which light carriages muſt likewiſe go.

All four-wheeled carriages ſhould have the hind and fore wheels regulated to roll in the ſame track; the ordinary width of the wheels is four feet eight or ten inches; that of waggons or carts generally meaſure five feet two inches; to which chaiſe wheels, being principally intended for the country, are adapted. It is immaterial to what width wheels are ſet, if uſed for running upon ſtones; but on marſhy roads, if their exactneſs is not attended to, the draught is conſiderably increaſed. The different heights of hind and fore wheels make alſo a difference in the length of their axletrees, agreeable to the proportion they bear to one another: the fore wheel has the longeſt axletree, by one or two inches between the ſhoulders.

The

The length of the *carriage* is regulated by the ſize or length of the body it is intended to carry, but always takes its meaſure from the two centres of the hind and fore axletrees. In general, a perch *carriage* meaſures nine feet two inches for a chariot, and nine feet eight inches for a coach: a crane-neck *carriage*, on account of the bow for the wheels to paſs under, meaſures, for a chariot, nine feet ſix inches—for a coach, ten feet.

In phaetons, the variety being ſo great, there is no rule to go by, as it depends on the ſituation the body is placed in, and whether intended for one or two horſes; but their conſtruction is ſimilar to the reſt. Many perſons are of opinion, that by contracting the length of the *carriage*, a material difference is made in the draught; but the advantage thereby gained is trifling in compariſon with the eaſe and elegance of a carriage of a proper length: beſides, the reſemblance they have to common hackney carriages, ought to be a ſufficient objection to their uſe.

The forms of building four-wheeled *carriages* (except in the difference of perch and crane neck) are nearly the ſame in all. The timbers are united to the perch in one general way; as are alſo the timbers to the cranes; ſo that one repreſentation of each *carriage*, which is of a chariot proportion, by ſhewing the views, and deſcribing their ſeveral parts, will ſufficiently explain

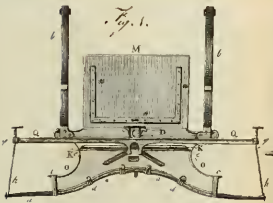


Fig. 1.

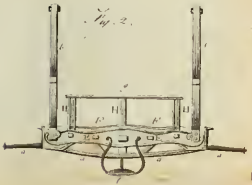


Fig. 2.

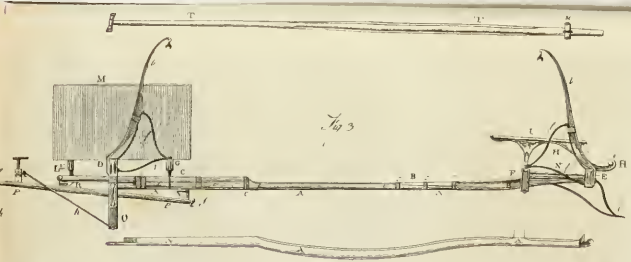
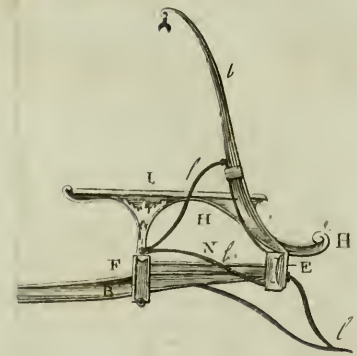
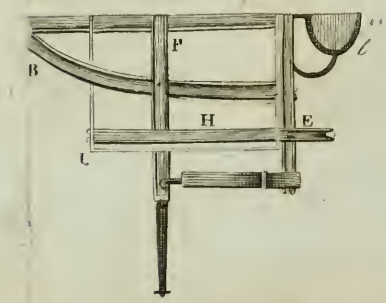


Fig 3

Fig. 4.

T
T
VI.


l
l
H
N
l
H
F
E
B
l


F
B
l
H
E
L

plain the whole: their iron-work is alſo deſcribed, for the better information in that material article.

SECT. 1.

DESCRIPTION OF PERCH *CARRIAGES.*

PLATE VI.

Fig. 1, 2, 3, and 4, are the front, the back, the ſide, and top view of a perch carriage, without a coach-box. The length deſcribed is that of a chariot *carriage*, but the repreſentation will anſwer for either coach or phaeton: the length of the perch, and the ſtrength of materials, make the only difference.

Fig. 1, is the front, ſhewing the under *carriage* united with the upper, the proper length and depth of the fore tranſom and fore axletree bed, and in what manner the futchels are fixed in the bed, and how the ſplinter-bar is placed on the futchels with the wheel-irons on, ſhewing the axis, and the manner it is confined in the bed, and the length of the arms on which the wheel goes, the fore tranſom has the boot and ſprings fixed thereon, ſhewing the proper ſituation of the ſprings, and how faſtened.

Fig.

Fig. 3, is the ſide view, principally ſhewing the perch, and how connected with the other timbers at the hind and fore ends (the ends of the timber acroſs the perch is only ſeen), the ſprings and ſtays in their proper ſituation, and how the ſhort blocks are placed on the hind, and the boot on the fore end, when uſed.

Fig. 4, is the half-top view, ſhewing in what manner the timbers are framed acroſs the perch, and how otherwiſe confined; the hind foot-board and boot are lightly repreſented, ſo as not to prevent the ſight of the under framings.

A. The perch, which is the main timber of the *carriage*, by extending through the hind and fore ſpring tranſom or bars. By it the principal part of the upper *carriage* is ſupported. The hind part is ſupported and united to it by means of hooping two extending timbers, called wings, on the ſide. The fore end is fixed or united to the perch by means of a ſtrong piece hooped at the top, and framed through the fore tranſom, called a hooping-piece: but ſome *carriages* have a horizontal wheel in the front, the ſame as the crane-neck *carriages*; and theſe have no hooping piece to the perch, but are ſecured by means of ſide-plates. Thoſe on the general principle have, at the bottom in front, a flat piece, left extended, called a tongue, which goes through a large mortice in the fore axletree bed, and through which the

the perch-bolt paſſes: its uſe is to keep the fore axletree bed ſteady in its place.

Sometimes the perch is made of a bent form, called a compaſs perch, for the purpoſe of admitting the body to hang low, or to form a more agreeable line to the ſhape thereof: thoſe perches are of a very ancient form, but are now revived with conſiderable improvement from their original ſhape, and are become the prevailing faſhion. In order to give a proper deſcription of them, a compaſs perch is introduced between the two views, to ſhew their preſent ſhape: when the *carriage* is intended for a whole or horizontal wheel, the perch has no hooping-piece, but is bolted by the plates at each end to the inſide of the tranſoms.

Plating with iron the ſides of perches is a great improvement, and is now moſt generally done, and always muſt be, to thoſe compaſs perches, if required to be light in their appearance, as the ſize of the timber is ſo much reduced by cutting them to this ſhape.

To the ſtraight or compaſs perch, iron plating on the ſides is a great addition, as it will admit the timbers to be ſo much reduced, that a ſufficient ſtrength is preſerved, though but half the uſual ſize; the plates, as fixed edge-ways to the ſides of the perch, will ſupport ten times more weight than if flat-ways on the bottom, which is

the

the method of plating a perch in the plain or common way; and many of thoſe carriages which are made up for ſale have even the bottom plate omitted; but the certain conſequence of this ſuperficial method is, the ſinking or ſettling of the perch, whereby the *carriage* is contracted quite out of its form, to the great injury of it, both for uſe and appearance, and there is no remedy but by a new one.

B. The hind hooping-wings, ſo called from their extended form, are the principal ſupport of the hind framings, being hooped on the ſides of the perch, and extend to the hind ſpring tranſom, through which they are framed: they alſo help to ſupport the axletree bed, which is bolted thereon.

C. The fore hooping-piece, is a large timber hooped on the top of the perch, and which unites the fore end to it, being ſtrongly framed through the fore tranſom or ſpring-bar; extending to the out circumference of the horizontal half-wheel, which it alſo helps to ſupport, when there are no fore wings; on it the budget-bar reſts, and is fixed thereto.

D. The fore tranſom, or fore ſpring-bar, is the moſt eſſential part of the croſs framings. It is a ſtrong timber fixed to the perch by means of a hooping-piece, or otherwiſe receives a tenon of the perch, if a hooping-piece is not uſed, which

perch is alſo ſtrengthened by means of plates bolted to their ſides and to the tranſom. The fore or under *carriage* is confined hereto by means of a large, round, iron pin, called the perch-bolt, paſſing through its centre: on the bottom is a thick, flat plate, made fluſh to the edges, called a tranſom-plate: on the ends the ſprings are fixed; and on the top the boot, or the block that ſupports it, is placed: between the ſprings and the boot, the uſual coach-box alſo is fixed.

E. The hind tranſom, or hind ſpring-bar, ſomething ſimilar in its uſe with the fore tranſom, but not required to be of ſuch ſtrength. In it the perch, and the timbers which run parallel with it, are framed; and on the ends the hind ſprings are fixed, the blocks or pump-handles are placed on the top, and the footman's ſtep bolted on the outſide.

F. The hind axletree-bed, a ſtrong timber which receives the axletree. It is fixed by being bolted to the perch, and the wings on which it is lapped or ſunk. In this, and in the ſpring bed, are two ſmall timbers tenoned, called nunters: one of the bearings of the blocks reſts on this bed, as alſo do the ſpring-ſtays. The bottom is grooved to receive the axletree, which is called bedding for the axletree, but is moſtly bedded at the ends only, excepting when the axletree lies above the perch, or when the perch is framed through

through the bed, in which caſe the axletree is bedded all the length of the timber. At the two ends of this timber are left projections, called cuttoos, which cover the top or back end of the wheels, to ſhelter the axletree-arms from the dirt, which would otherwiſe get in behind the wheels, and clog them.

G. The budget-bar, frequently called a horn-bar, from the original ſhape thereof, but it is now only a ſtraight timber, on which reſts the boot or budgets, or the blocks that ſupport them. It has only a bearing in the middle on the perch: on it, at the ends, which are ſometimes ſocketted, the fore ſpring-ſtays reſt, for which uſe it is principally calculated, aſſiſted materially in its ſtrength by an iron ſtay, which fixes to the bottom of the perch and at each end of this bar.

H. The hind blocks, which, when further extended than what is here repreſented, are called pump-handles: they are frequently called raiſers; their uſe is only to heighten the platform from the hind framings, that the appearance may be light, and that the footman may be ſufficiently raiſed according to the height of the body: they are bolted on to the axletree bed and ſpring-bar; and, to leſſen their too heavy appearance, are often neatly ornamented with carving.

I. The foot-board, or platform, on which the trunk, the cuſhion, or the ſervant ſtands, is a flat

flat, thick, elm board, bolted on with the blocks, to which it is alſo ſcrewed.

K. The wheel-piece, is a caſing on the horizontal half-wheel plate, and is of no other uſe than to ornament the iron, which it is placed on, being ſcrewed from the bottom of the plate, and fixed a little way in the tranſom.

L. The fore block, an ornament at the front part, fixed on the top end of the fore hooping-piece, and ſupports the boot or budget in the middle of the front, to which it is bolted: this block is moſtly united to the ſide-blocks, or raiſers, of the boot.

M. The boot, a large, ſquare box, framed and boarded, and is ſometimes made of ſtrong elm boards, nailed and ſcrewed together, having a door in the front, which ſhould be framed and boarded, and confined by a bolt and thumb-nut. The ſurface of this boot ſhould always be covered with a ruſſet, or japanning leather: it is bolted acroſs the tranſom, the boot-bar, and boot-block; and is ſometimes raiſed on ſide-blocks to lighten the appearance of the fore end.

N. The nunters, are two ſhort pieces of timber fixed under the block, and tenoned in the axletree-bed and ſpring-bar, to aſſiſt their ſtrength, and keep them more ſecurely together.

O. P. Q. and *R.* The fore or under *carriage*, united to the upper *carriage* by the perch-bolt.

O. The fore axletree-bed, a large, ſtrong piece of timber, in which the fore axletree is bedded: on this the upper *carriage* reſts; it has a large mortice near the top, in which the perch-tongue is placed. In this timber the futchels are fixed: it has alſo cuttoos on the ends the ſame as the hind bed has.

P. The futchels, are two light timbers, fixed through the fore axletree-bed, nearly of the ſhape of the hind hooping-wings; contracted in the front, to receive the pole, which part of the futchels is called the chaps; but widens towards the hind end, on the top of which the ſway-bar is placed; on the fore ends, and acroſs the chaps the ſplinter-bar is fixed. They are framed in a ſlant direction, to give a proper height to the pole; but when a whole wheel is in the front, then the futchels are framed in a horizontal direction, and are made to riſe obliquely from the front of the horizontal wheel, otherwiſe the pole muſt be made compaſſed, to raiſe it to a proper height for the horſes.

Q. The ſplinter-bar, a long timber to which the horſes are faſtened, and is fixed on with roller-bolts near the fore end of the futchels, from which it is a little raiſed, to admit the pole being placed in the chaps: on the ends are ſockets with eyes, in which the wheel-irons are placed, and alſo

from thence to the axletree arms, contracting the ſplinter bar tightly back, to oppoſe the tugging by draught, which is taken from the roller-bolts, at the ends and middle.

R. The front felly-piece, is a ſmall part of the ſame circle as the upper wheel-plate, made to fill the ſpace between it and the futchels, to which it is bolted. Its uſe is to make a firm bearing for the upper *carriage* to work on; ſo that, in whatever direction the fore *carriage* may be, a ſteadineſs is always preſerved.

S. The ſway-bar, is a timber forming part of a circle made for a bearing againſt the perch, as far as the locking of the fore wheels makes it neceſſary. Its uſe is to preſerve a ſteady action of the fore *carriage:* it is bolted on the back ends of the futchels, uſually plated on the top ends with iron: the middle is lined with hard leather, to prevent a noiſe in uſe.

T. The pole, a long timber which occaſionally is placed in the futchel-chaps, being nicely fitted therein, and is confined by two plates, the one bolted at the bottom in front, and the other at the top, at the back end of the chaps: it is alſo ſecured by a wooden pin, called a gib, which is placed acroſs the futchels, and in a ſtaple which is in the pole: an iron pin alſo goes through the futchels and the pole at the fore end;

on each ſide of the pole the horſes are placed, and ſtrapped to a loop at the fore end, called a pole-ring: its uſe is to conduct the fore *carriage*, and may properly be called a *carriage* lever.

U. The pole-gib, is a ſmall piece of wood, made flat at the bottom, and is rounded at the top, to fit the ſtaple in the pole, which it keeps from riſing up at the fore end, nailed on by a looſe ſtrap to the futchels, and kept in its place by another ſtrap nailed on the oppoſite ſide, which is hitched on a braſs or plated button.

Although the iron-work and its properties are ſeparately deſcribed in the Plate, yet the explanation will be more clear by pointing out here their ſituations, which is done in ſmall letters placed againſt the different parts, which are named as follow:

a. The hind and fore axletrees.
b. The hind and fore ſprings.
c. The perch and axle-hoops.
d. The axletree-clips.
e. The tranſom and wheel plates.
f. The ſpring-ſtays.
g. The ſplinter-bar ſockets.
h. The wheel-irons.
i. The ſide perch-plates.
k. The ſplinter-bar rolls.
l. The footman's ſtep.

m. The

VI
D
D

m. The ſway-bar plates.

n. The budget-plate.

SECT. 2.

CRANE-NECK *CARRIAGES.*

Fig. 1, 2, and 3, repreſent a chariot crane-neck *carriage*, in the ſide, the top, and fore end views, with the coach-box, and a platform, or luggage-boot, in their proper ſituations. The wheels are added to this *carriage*, ſhewing their proper height and diſtance from each other, commonly called the track; alſo the circumference which the fore wheels take in turning, by which the bows of the cranes are regulated in their diſtance, and in their height, by the height of the wheels.

The timbers of this *carriage* are of the ſame deſcription of the laſt, excepting the perch and hooping-timbers, which, in this ſort of *carriage*, are not uſed. The hind and fore ends are fixed to the cranes, which makes the bearings more ſteady than thoſe of a perch *carriage*. The addition of wood-work to this *carriage*, may be added to the laſt deſcribed, and is as follows:

A. The croſs framings, called wings, or fore hunters, which are framed through the fore tran-

ſom, and ſupport, at the two ends, the horn-bar and fore-bars.

B. The ſide-blocks, bearing on the tranſom, the horn, and fore bars, to which they are confined by bolting.

C. A whole wheel-front, which is neceſſary for all crane-neck *carriages*, for the purpoſe of preſerving a ſteady bearing to the fore *carriage* while turning round. This ſort of fore end is alſo frequently uſed to the perch *carriage*, and is a great improvement thereto.

D. The hind blocks, the ſame as *H* laſt deſcribed, only are made longer behind, in order to aſſiſt the ſervant in mounting, and are called pump-handles.

E. The platform, or luggage-boot, made only as a platform, being a thick, elm board, with ledges ſcrewed round to ſtrengthen it, and to receive the irons which form the ſhape for the ſides, and are bolted on the bottom, having two pieces fixed upright to ſupport the irons in the middle, having alſo two ſlats, or hoop-ſticks, fixed acroſs, which loop in ſtaples fixed in thoſe upright pieces, to ſupport the cover in the middle.

The coach-boxes, which are of two general ſorts, ſuch as the Standard and Saliſbury, are ſhewn apart, and deſcribed at *I, K, L, M, N, O, P*, which directs the method of framing them :—

the

the Saliſbury is repreſented in perſpective; the other in two views with the *carriage.*

F. The fore ſtandards; the main pillars of the coach-box, which ſupport the ſeat, are fixed on the fore tranſom by plates, and are alſo ſupported by a ſtay bolted to the horn-bar.

G. The ſtays, framed in the ſtandards, and curved upwards to receive the foot-board, which is fixed thereon, and ſtrengthened by an iron compaſſed ſtay.

H. The box-bars, framed in the ſtandards to keep them ſteady at top.

I. The fore foot-board, for the coachman to place his feet againſt, having his purchaſe aſſiſted by a ledge ſcrewed thereon. The foot-board is bolted on the ſtays, which are confined and ſtrengthened by it.

K. The brackets, or ledges, two pieces of wood, which are carved, and fixed on the foot-board ſides for ornament only.

L. The ſlats, or ribs, firmly ſcrewed or nailed in the bottom and top, which form the boot behind, and ſupport the leather that is ſtrained round them.

M. The bottom, made of two ſtrong elm boards placed acroſs each other, and to which the other timbers are fixed, aſſiſted alſo with iron-work.

 N. A ſtrong

N. A ſtrong board fixed on the top bar, projecting back, for the ribs to be fixed into.

O The two upright ſtays, which form the boot in front, and ſupport the other ſtays by being bolted thereto.

P. The front, which is always boarded over the vacancy, for the leather to be placed upon.

The iron-work to this *carriage*, which is different from the laſt, is only here to be deſcribed, and that alſo in ſmall letters.

a. The cranes, with ſingle bows, and a little formed on the hind ſweep.

b. The back-ſtays, which ſupport the coach-box.

c. The compaſs-irons, which ſupport the foot-board and ſtays.

d. The ſeat-irons, with a ſtay to each, on which the cradle for the ſeat is to be fixed.

e. The ſtandard-plates, with which the coach-box is fixed to the tranſom, by clipping on it between the boot and ſprings, and is ſecured by two bolts to each.

f. The whole or horizontal wheel-plate, fixed to the bottom of the fore tranſom and horn bar, for the fore *carriage* to lock ſteady by.

g. The luggage boot-irons, with which the boot is made or formed on the ſide, having the vacancy covered with leather.

Thoſe

Thoſe two *carriages* are repreſented and deſcribed principally as a poſt-chaiſe or chariot; but both repreſentations and deſcriptions will anſwer for coaches and phaetons, either perched or crane-necked; the difference lies only in the length, and not in the form; which difference may be known from the further deſcriptions given of carriages in the finiſhed ſtate: the boots, the coach-boxes, and the raiſed hind and fore ends, are only repreſented here, for information how they are placed when intended for coach or chariot.

CHAP.

CHAP. IV.

TWO-WHEELED *CARRIAGES.*

THOSE *carriages* have the advantage of all others for ſimplicity and lightneſs; but in this ſort of carriage there is more riſk than in thoſe that are four-wheeled, particularly if the horſe is not tractable and ſure-footed. That which makes the variety of this ſort of *carriage*, is the method of placing the bodies, whether hung from ſprings or fixed on the *carriage*, which is decided principally by the fancy of the occupier: the generality fall under the deſcription of curricles, gigs, whiſkies, or chairs; but that wherein the principal difference lies, is the curricle, being formed for two horſes abreaſt, which at preſent is the moſt faſhionable carriage in uſe; the gig from the whiſkey alſo differs materially, the whiſkey being conſtructed on the moſt ſimple plan, with the body united to the *carriage*, while the gig exhibits a greater portion of fancy, having the bodies hung in various directions; it is by the form of the *carriage*, and the method of placing the

the body, that they are named; as gig, curricle, &c.

Thoſe open carriages are generally intended for the country, and are made longer on the axle-tree than in other carriages intended for town uſe only, in order that the wheels may fall or go in the waggon tracks.

The ſtrength of the *carriage* in this, as in all others, is to be regulated by the ſize of the body which it is meant to ſupport, as alſo the places in which it is to be uſed; as in rough roads an addition of ſtrength is required in building. The timbers are uſually of aſh; but a preferable method of building, is to make the ſhafts of a foreign timber, of the Weſt-India growth, called lance-wood, which is of ſufficient ſtrength, even when reduced to half the ſize of aſh, and is ſo remarkably elaſtic as to give great eaſe to the rider, and always preſerves the ſhape; whereas the aſh ſhafts are obliged to be made clumſy, and ſoon ſettle by the weight, and, beſides, require to be aſſiſted in their ſtrength with iron plates at the bottom, which cannot at all be applied to the lance-wood ſhafts, on account of their elaſticity. The draught is much preferable when taken from a ſplinter-bar, which yields to the motion and pull of the horſe; and the nearer to the axle the fixtures, uſed to draw by, are placed, ſo as not to be very low from the purchaſe,

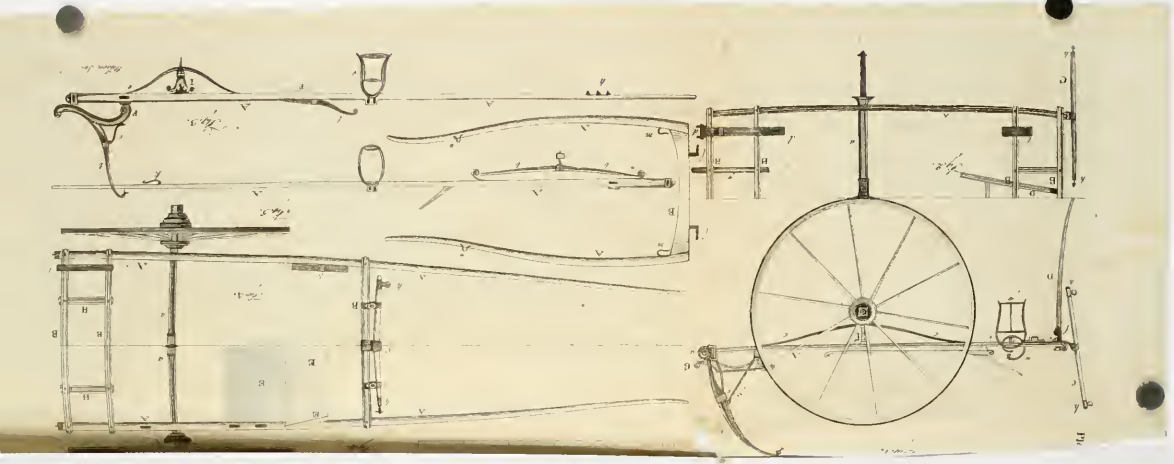
chaſe, the lighter is the draught. The *carriage* ſhould be ſo made, that the axletree may be placed nearly on an equilibrium; ſo that, when the paſſengers are in the body, the weight may not exceed 30lb. on the back of the horſe; obſerving alſo to have room at the ſtep, ſo as not to be obſtructed by the wheel on entering the carriage.

The variety of thoſe two-wheeled *carriages* can be underſtood better by the repreſentation given on the plate than by deſcription, as they are all ſimilar in their conſtruction, though very different in their uſe: but, compared to other ſorts of *carriages*, they are very ſimple. The materials of which they are compoſed are but few, and their purpoſes nearly the ſame in each; ſo that one deſcription, aſſiſted with the general repreſentation in the plate, will furniſh every information neceſſary on that ſubject.

PLATE VII.

Fig. 1, 2, 3, 4, 5, and 6, The ſide and top views of a curricle, gig, and whiſkey *carriage*, being the three moſt generally in uſe.

Fig. 1 and 2, The ſide and half-top repreſentation of a curricle *carriage*, framed wide and long,



E
A
H
a
B
B
a
H
A
b
k
b
c
F
A
I
e
Fig. 3.
Wilson Sc.

long, for the purpoſe of admitting the body to hang between, which is the preſent mode of building.

Fig. 3 and 4, A gig *carriage*, in the ſame views as the curricle, with the wheels added, ſhewing their diſtance apart. The body in this repreſentation is ſuppoſed to hang above the ſhafts; therefore the *carriage* is not ſo long or wide between the framings, which is always prepared according to the method or fancy of hanging the bodies. Thoſe *carriages* are made to either pattern, and for either uſe, excepting the ſhafts to the gig, and the additional framing at the fore part of the curricle.

Fig. 5 and 6, The ſame views of a whiſkey or chaiſe *carriage*, for the building of which there is but one rule, the body being framed or fixed on the ſhafts, having the footboard and bottom alſo ſecured thereto.

Fig. 7, The ſhafts, uſed to a one-horſe four-wheeled carriage, which hang looſely on the horſe, anſwering the purpoſe of a pole to turn or lock the *carriage* by.

A. The ſhafts, which are the ſide framings and principal part of the *carriage*, by which it is ſupported by the horſe: they are regulated to a general width at the point, meaſuring two feet three inches acroſs; the length from the bar of draught

draught is ſix feet ſix inches, and the height in proportion to that of the horſe intended; but are, in general, made to thoſe of a middle ſize, or 15 hands: thoſe to a curricle, are only properly called ſhafts, that are applied when one horſe is uſed to that ſort of *carriage;* the others ought only to be called ſide-framings; in thoſe, as alſo in the proper ſhafts, the croſs-bars are framed, and are tenoned, morticed, or lapped, as the builder's judgment may direct; aſſiſting alſo, where ſtrength is required, by plates, uniting the bars with the ſhafts, particularly in the curricle at the fore ends, which cannot be made too ſafe.

B. The croſs-framings, called hind or fore bars: thoſe on which the ſprings are fixed, are called ſpring-bars; the front bar to a ſingle-horſe *carriage* is what the draught is moſtly taken from, by means of a ſplinter hung thereto; the additional fore-bars to a curricle are to aſſiſt the ſtrength, and form a bearing for the pole, which by a cloſe leather brace are fixed in ſockets at their bottom.

C. The ſplinters, or ſplinter-bars, hung on the fore-bar to chairs, or in loops to curricles, having iron-work at the ends called ſockets, for the traces to be faſtened to.

D. The ladder-prop for the curricle, which it ſupports while ſtanding, or when the horſes are putting

putting to: it is fixed on the fore-bar, with jointed iron-work, which, when the horſes are put to, admits it to be thrown back to the back-bar, where it is ſecured by means of a ſpring catch, or a ſtrap and buckle.

E. The brackets, the foot-board, and the bottom of a whiſkey, which are fixed on the ſhafts, and conſtitute a part of the carriage.

F. The hind and fore blocks, on which the ſprings are placed, are chiefly uſed as an ornament to this ſort, as well as to phaeton carriages.

G. Small blocks, for ſupporting a platform, which they raiſe above the bars, and which lighten its appearance, and may be uſed or omitted at pleaſure.

H. The croſs-framings, called nunters, which ſerve to ſtrengthen and fill the ſpace between the bars.

I. The raiſers, which ſupport the ſhafts from the axletree; ſometimes are only turned, and ſometimes carved, to ornament the carriage.

a. The axletree.

b. The ſprings.

c. The ſpring-ſtay.

d. The ſpring-jacks.

e. The main or bottom ſtays, terminating in loops at the curricle's fore-end, and at the fore-bar in a chaiſe.

f. The

f. The ladder-joints.

g. The ſteps, double and ſingle.

h. The ſplinter-ſockets.

i. The curricle-ſockets for ſhafts.

k. The tug-plates or ſtops.

l. The hooks by which theſe ſhafts hang on the ſplinter-bar.

m. The hooks the traces are fixed to.

n. The breeching-ſtaples.

PRICE

PRICE OF *CARRIAGES.*

ON account of the great variety in the form and ſize of *carriages*, it would be difficult to affix the exact value of every different deſcription of them; but, to take them in the moſt general way they are built, and omitting ſome particulars to be by themſelves treated of, they may be reduced to a rule, regulating them to five claſſes, viz. the coach, the chariot, the large, the middle and ſmall-ſized phaetons. The two former only have coach-boxes; the reſt generally have boots, and alſo raiſed fore and hind ends, properly called platforms.—Therefore, to reduce the price of *carriages* to any certain rule, thoſe articles muſt all be excepted; and a reference to the deſcriptions and prices of them, which are afterwards ſtated, will enable the proprietor to know how to add any of thoſe requiſites, and be a competent judge of the value and form of whatever kind of *carriage* his fancy may lead him to make choice of.

Coach and chariot *carriages* are built exactly ſimilar to each other; the only difference is the ſuperior ſtrength of the materials.

Phaetons have a great ſimilarity to them; but the ſituation of the ſprings, which are placed in

various directions for the body to hang from, makes the appearance the only material difference from other *carriages*: ſo that, by excepting the blocks and budgets, they will be reduced to the ſame principle as the others.

The workmanſhip is nearly the ſame in value to all *carriages* on the plain ſyſtem. The materials are ſomewhat reduced in their value for the leſſer *carriage*, and bear the reduction of one-tenth from each other. Their value, when thus far executed, is what is reckoned the firſt charge or rule to follow; the wheels, the boots, the coach-boxes, the raiſed hind or fore ends, the blocks for the ſprings, and alſo the painting, are added afterwards; ſo that, in whatever manner they are completed, their value may be aſcertained.

The additions to two-wheeled *carriages* are very few above what are repreſented in the plate: the platform and budgets behind the daſhing-leather, and the odds of double ſteps before, are the principal of the additions, and which are particularly mentioned hereafter.

THE

THE TIMBER, CARVING, IRON-WORK, AND MAKING OF *CARRIAGES*,

WITHOUT BLOCKS, BOOTS, COACH-BOXES, OR WHEELS.

	Coach.			Chariot or Poſt-Chaiſe.			PHAETONS. Large.			Middle.			Small.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
Perch *carriages*, including the timber, &c. as above	24	15	0	22	5	0	20	0	0	18	0	0	16	4	0
EXTRAS TO DITTO.															
The ſide of the perch plated with iron	3	3	0	2	15	0	2	10	0	2	2	0	1	16	0
The perch made of a bent or compaſſed form	1	1	0	1	1	0	0	18	0	0	18	0	0	16	0
A whole-wheel front	2	10	0	2	5	0	2	0	0	1	15	0	1	10	0
A half-wheel front	1	5	0	1	3	0	1	0	0	0	18	0	0	15	0
Crane-neck *carriages*	41	0	0	36	18	0	33	10	0	29	18	0	26	18	0
EXTRAS TO DITTO.															
The cranes having double bows	3	3	0	2	15	0	2	10	0	2	2	0	1	16	0

	Curricle.			Gig.			Whiſkey.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
Two-wheeled *carriages*	15	0	0	11	11	0	9	0	0
The curricle, with ſhafts for a temporary uſe	18	10	0	—	—		—	—	
The gig-made curricle, for frequent alternate uſe	—	—		16	0	0	—	—	
Whiſkey-made curricle	—	—		—	—		13	0	0

By this ſtatement, the value of every kind of *carriage* is to be obtained, any way completed, by adding thereto whatever conveniencies or ornaments may be thought neceſſary, and which are afterwards diſtinctly treated of.

CARVING.

THIS art contributes more effectually than any other part of the work to the beauty and elegance of a town or ſtate carriage. In common carriages, all that is meant by carving, and which ſcarcely deſerves the name, is the finiſhing the ends of the timbers with ſcrolls, and the edges with mouldings. If any carving is beſtowed on thoſe plain carriages, it is on the blocks or raiſers, whoſe front views are more conſpicuous than any other timbers, and requires ſome degree of fancy to reduce their bulk to any agreeable appearance.

The only perſons at variance with this art are the coachmen, who, from the greater difficulty of cleaning after uſe, reſent the extra trouble they are put to, and with the mop and bruſh endeavour to deſtroy thoſe ornaments with which the carriage is beautified.

On carriages for common uſe, the more ſimple and plain the ornaments are the better, ſo as a good deſign is but preſerved, leaving the painter's pencil to effect what is omitted in the carving, which is a tolerable ſubſtitute in a common, but a very poor one in a ſuperior, carriage. The carving being a neceſſary ornament to the

timber-work, its value is always included, and proportioned to the quantity contained, and the excellence of its execution, and which muſt depend on the ſufficiency of the artiſt. The different repreſentations of blocks in Plate 12 will tend to give ſome information of the price of carving, as the timber-work is the ſame in expence for carved as for plain blocks: the increaſed amount on blocks is the conſequence of the ſuperior ornaments, which may be increaſed to any value.

CHAP. V.

IRON-WORK.

THE articles of this ſort are exceſſively numerous, and are manufactured by a variety of different mechanics, ſuch as ſpring, axletree, ſtep, and tyre ſmiths, &c. which will all here be conſidered under one head, and the moſt eſſential articles treated of ſeparately, without enumerating every trifling article that is occaſionally uſed, and which would be almoſt impoſſible to ſelect.

This, next to the timbers, is what ought to be particularly attended to, for the advantage of good materials and workmanſhip, which, together, greatly add to the preſervation of the *carriage.* The whole of the iron-work requires to be made of particularly tough iron, and fitted with great exactneſs; taking care that each gives its proper ſupport without ſtraining or twiſting, and that its ſubſtance be adequate to the weight it is meant to carry. All the external parts ſhould be well filed, and formed in whatever ſhapes they may be required.

The

The iron-work forms, and is, the principal part of the *carriage*, both for value and uſe. Its properties cannot be too well attended to. For the purpoſe, therefore, of giving every information on that material article, it is here ſeparately repreſented, although included in the former value and repreſentations where its connections with the timber are deſcribed; but as many articles in iron-work would be found wanting to ſome future alterations, the ſeparate value of the moſt material or likely will be given apart from the timbers.

SECT. 1.

SPRINGS.

SPRINGS, by which only riding is made comfortable, require the greateſt attention to their properties, otherwiſe their effect is materially injured. They ſhould be all manufactured of a well-prepared ſteel, properly tempered. The greater the number of pieces or plates there are, confined within the ſize of the hoop, the better; and the longer the ſpring is, the more eaſy and elaſtic its motion will prove. Thoſe that are the leaſt erect, and of courſe that incline

moſt to the weight they carry, and that are alſo the longeſt from the bearing or ſtays, have a ſuperior advantage.

Their forms are various, according to the purpoſes for which they are deſigned; and they are named according to their ſhape—ſuch as the S, the C, the French horn, the ſcroll, the worm, the ſingle and double elbow, or graſshopper ſpring, which are all ſhaped according to the ſituation in which they are to be placed.

The ſprings all ſupport the weight at their extremities, by means of loops or ſhackles; and their elaſticity is only from the hoops, at which part the plates are all made thickeſt, gradually tapering thinner to their extremities, and ſhortening about four inches in each plate from the hoop, where the bearing for the ſpring is fixed. Thoſe that are placed in an erect form, are obliged to be ſupported with iron ſtays, which clip the ſpring at the hoop; thoſe that are placed horizontally are ſupported from the middle, and play their whole length; thoſe that are made of a circular form have frequently no ſtays, but are well ſecured at the bearings. Short, light ſprings, which contain but few plates, have frequently no hoops; but the plates are confined with a ſmall rivet, and the bolts with which the ſpring is confined to its bearing.

The

Plate

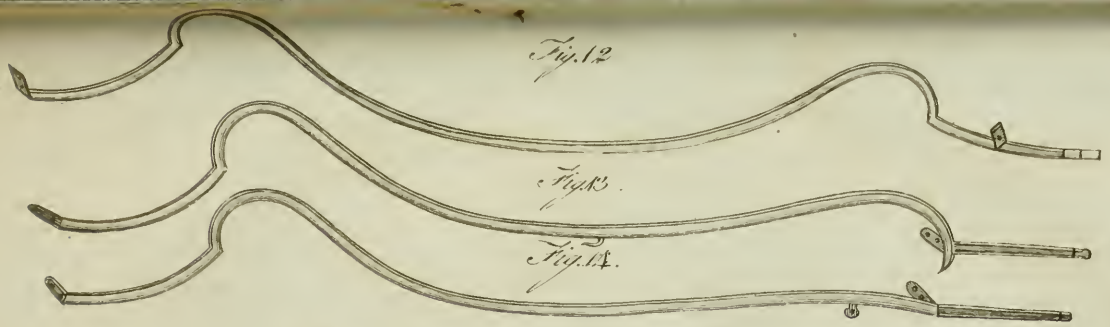


Fig. 12
Fig. 13.
Fig. 14.

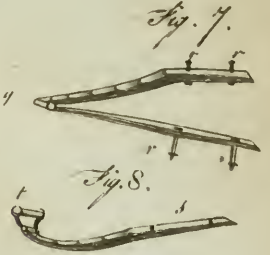


Fig. 7.
Fig. 8.

Fig. 1.

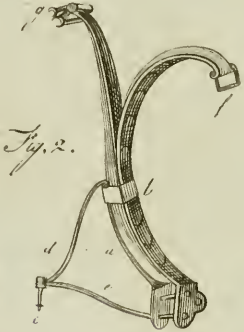


Fig. 2.

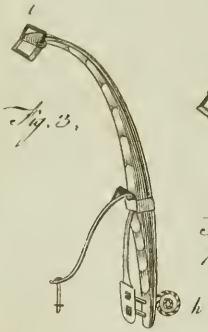


Fig. 3.

Fig. 11.

Fig. 10.

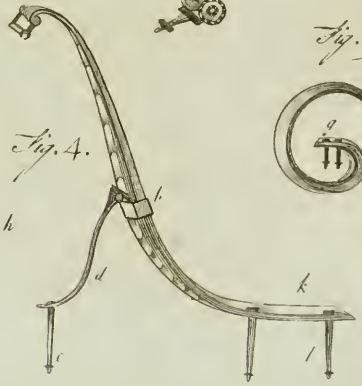


Fig. 4.

Fig. 9.

Fig. 6.

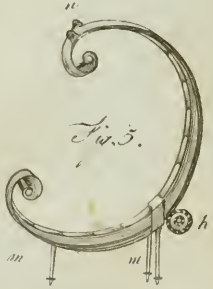


Fig. 5.

The variety of ſprings in uſe could not all be repreſented, nor the different values of them aſcertained with accuracy. What is repreſented in the plate will convey ſufficient information of thoſe generally now in uſe.

COACH AND CHARIOT SPRINGS.

Fig. 1. The uſual form of ſprings uſed to carry the body of a coach or chariot. This is called an S ſpring: it is made with a ſtay *a*, which is rivetted within the hoop *b*, and clips at bottom the fore or hind tranſom, and is there fixed by this bolt *c*. and is ſupported at the hoop by a ſtay *d*, which reſts on the hind axletree bed, or budget-bar; a ſtay *e* alſo clips or bolts through the ſpring at bottom, and clips or unites in a cup with the other; to oppoſe the preſſure, it has a ſhackle *f* bolted looſely on the top, for the weight to hang by.

The difference in expence of thoſe ſprings betwixt coach and chariot, is on account of their different ſizes; the coach has one or two plates more than the chariot, and is made ſomewhat wider acroſs the back.

DOUBLE

DOUBLE SPRINGS.

Fig. 2. The form alſo of a ſpring for a coach or chariot: it has united to it at the back plate an additional ſpring, which turns the reverſe way, to carry ſeparate things with the body, ſuch as the budget before, or platform behind; having a double ſhackle at *g*, the one to carry the body, and the other the boot or platform, the reverſe ſpring has only to carry the hind part of the ſame boot or platform. The ſtays and loops, marked *a*, *b*, *c*, *d*, *e*, *f*, are for the ſame purpoſe as the former, the bottom ſtay being only differently formed; the former clips, and this cups on the bed or bar.

GIG SPRING.

Fig. 3. This ſpring carries the weight, and is fixed in the ſame manner as the others: the form is frequently uſed for either of the above purpoſes, but is here repreſented only as a gig or curricle hind ſpring, having a jack at the bottom *h*, and a double-loop ſhackle at the top *i* for the brace, which is fixed in it, and extends to the body-loop, from which it returns through the upper loop, and down the back of the ſpring, and is

ſecured

ſecured in the jack at the bottom; this requires no ſtay at the bottom part, it being fixed on the bar near the ſhaft, which anſwers the ſame purpoſe.

LONG-TAIL PHAETON SPRING.

Fig. 4. This ſpring has a long flap *k*, and is ſupported on carved blocks, to raiſe and ornament them, on which blocks they are fixed by bolts, which paſs through them and the croſs-framed timbers. Thoſe ſprings are obliged to be ſtayed on the inſide, at the middle, and top, to prevent twiſting ſideways; they are ſupported at the hoop in the ſame manner as the reſt, by a ſtay, which takes its bearings on the block.

SCROLL SPRING.

Fig. 5. This is a peculiarly formed ſpring for eaſe, and is uſed to various kinds of carriages. It reſts, and is fixed on a long block for phaetons, or on the two bars only for coaches, &c. at the bearings *m m*; the bottom is ſometimes turned up in a ſcroll form, for ornament only, in imitation of the upper part; the brace is hung by a ſhackle,

ſhackle, or placed round the ſpring, and, paſſing through a loop *n*, is fixed in a jack at the bottom.

GRASSHOPPER, OR DOUBLE ELBOW SPRING.

Fig. 6. This is a ſpring uſed to light whiſkies or chairs. It is fixed on the axletree by a Jew's-harp ſtaple *o*, which ſtaple is united with the ſpring-hoop, and bolts through the axletree; it ſupports the weight at each end by one or two loops *p p*, which are fixed at the bottom of the ſhafts; it is moſtly fixed at the one end, but has room to play at the other. Thoſe ſprings moſt generally have only one loop at the hind end, in which it is fixed, and the other end bears on a thin plate fixed to the bottom of the ſhafts.

SINGLE ELBOW SPRING.

Fig. 7. A pair of ſingle elbow ſprings uniting together at the extremities by looping one on the other, and are there confined by a ſmall round bolt: they ſometimes have no hoops, but the plates are confined by a ſmall rivet, and the two bolts *r r*, which fix them to their bearing places; thoſe

thoſe are moſtly deſigned for phaeton or gig fore ends; frequently one of them only is uſed, having a loop in place of a double ſpring.

LOOP SPRING.

Fig. 8. This is ſometimes fixed on the end of the bottom ſide, to carry the body, inſtead of a ſolid iron body-loop; to give additional eaſe to the rider: it is bolted on at the bearing *s*, and receives the braces at the ſhackle *t*.

FRENCH-HORN SPRING.

Fig. 9. This is a circular ſpring uſed to the fore part of a curricle or gig. Sometimes the brace fixes to a ſhackle, but generally is placed round the back through the loop *u*, and is confined by the bolt *u*, which fixes the ſpring to the fore bar.

WORM, OR SPIRAL SPRING.

Fig. 10. This is a light, ſquare piece of ſteel, turned in the ſhape of a barrel, which is placed between the double of the main brace, to give eaſe to the paſſenger in riding; it is ſecured within the brace by two ſcrews *x x*, having two plates *y y* placed between the ſcrew and the brace.

SPRING JACK.

Fig. 11. This is a ſmall engine fixed to the bottom of the ſpring. Its uſe is to receive a brace when placed round the ſpring, which brace is fixed to a ſpindle that is turned with a wrench upon the outſide, and is there confined by a ſmall ratchet-wheel and ketch. Its uſe is to heighten or lower the body.

PRICE OF SPRINGS.

THE value of ſprings is in proportion to their ſizes. The ſhackles, the bolts, the loops, and ſtays, are repreſented with the ſprings: and being of neceſſity uſed with them, are included in the following ſtatements: The jacks, though repreſented, being a matter depending on choice, are ſeparately valued. The general height or length of ſprings is about three feet; and they are made light or ſtrong, as may be found neceſſary to ſupport the weight of the body; and as the ſame form of a ſpring may be uſed to different *carriages*, ſtating the value of two or three different ſizes of each form that is uſed, will make the information ſufficient for general uſe.

COACH OR CHARIOT SPRINGS.

Fig.		Coach. £.	s.	d.	Chariot. £	s.	d.
1.	A pair of S-formed ſprings, with ſhackles, ſtays, and bolts, complete	3	18	0	3	6	0
2.	A pair of double-returned ſprings, to carry body and boot, ſhackles, ſtays, &c. complete — —	6	10	0	5	10	0
5.	A pair of large ſcroll ſprings, for a travelling carriage, with clips and ſhackles complete — —	6	6	0	4	18	0
8.	A pair of ſpring body-loops —	1	15	0	1	10	0

PHAETON,

PHAETON, GIG, OR CURRICLE SPRINGS.

Fig.	Large. £. s. d.	Middle. £. s. d.	Small. £. s. d.
3. A pair of whip ſprings for a curricle or gig —	3 10 0	3 3 0	2 15 0
4. A pair of long-tailed high phaeton ſprings, with the front ſtay, ſhackles, and bolts — —	4 4 0	3 10 0	3 0 0
5. A pair of ſcroll ſprings for phaetons — —	4 10 0	3 15 0	3 3 0
6. A pair of graſshopper whiſkey ſprings, with loops and ſhackles complete —	3 0 0	3 0 0	2 10 0
7. A double pair of elbow phaeton fore ſprings —	1 15 0	1 10 0	1 5 0
7. A ſingle pair of ditto for loops — —	1 5 0	1 1 0	0 18 0
9. A pair of French-horn ſprings, for a curricle or gig — —	1 15 0	1 10 0	1 5 0
10. A pair of worm ſprings, ſcrews and plates complete	1 10 0	1 5 0	1 4 0
11. A pair of ſpring jacks —	1 0 0	0 18 0	0 15 0

In this ſtatement, the value of almoſt every kind of ſpring, generally uſed, is aſcertained. Their value is regulated by their length, to which alſo the plates are proportioned in number or thickneſs: upon an average, they may be computed at 1s. 6d. the inch for the ſmall, 1s. 9d. for the middle, and 2s. for the large-ſized ſprings; the meaſure to be taken from the bolt at the bearings to the centre of the top eye.

SECT.

SECT. 2.

AXLETREES.

THE axletree of a carriage is made in one entire piece, and is fixed quite acroſs the carriage; that part between the wheels is called the bed, and that which goes through the wheels, the arms, which ſhould be made perfectly round, and ſomewhat ſtronger at the ſhoulder than at the end, which is moſtly ſcrewed to receive a nut, through which and the axletree the lince-pin paſſes, to keep all tight. The nuts are made with a collar at the face, and a temporary collar or waſher is driven on to the back of the arms, which forms two ſhoulders for the wheel to wear againſt, and helps to preſerve the greaſe from running out, and to prevent dirt from getting in.

The axletrees are the principal or only ſupport of the carriage, on which every attention and care ſhould be paid to the ſelection of good iron, and to ſee that they be well wrought, and of ſufficient ſtrength, rather going to the extreme than to riſk the life of the paſſenger by the overſetting of the *carriage*, which moſtly happens when an axletree breaks. By the axletrees alſo the wheels are regulated to any width at bottom, to ſuit the track of the roads in which they are to run, and

are confined to the *carriage* by means of clips, hoops, and bolts, which are all deſcribed in plate XI.

The ſhape of the axletree between the ſhoulders varies according to the ſituation they are placed in, or the form of the timber with which they are united; thoſe are the moſt firm that are flat-bedded in the timber.

THE AXLETREE BOXES.

THOSE are frequently called long-pipe or wheel-boxes; they are long caſings fitted cloſe to the arms of the axletrees, and ſecurely fixed in the wheel-ſtocks, or naves; they are uſually made of wrought ſheet iron, of a ſubſtance proportioned to the weight of the carriage: their uſe is to contain a ſupply of greaſe, to prevent the effects of friction, and aſſiſt the wheels in their motion. Theſe ſucceeded the ſhort caſt-iron boxes, which, to *carriages* of this ſort, are totally out of uſe, they being injurious to the axletrees by cutting them at thoſe parts they wear againſt, ſo as to occaſion a frequent lining of the arms, now never neceſſary on that account.

There

There are many ſorts of axletrees and boxes invented various ways, for the following purpoſes: viz. for containing a longer ſupply of greaſe or oil, to be more durable, to ſecure the wheels, and to leſſen the draught.

Some of thoſe inventors even pretend, that all theſe advantages are combined in one axletree; but the generality of theſe inventions extend to the advantage only of retaining a ſupply of oil, and wearing a greater length of time than the others; but as it would not be juſt to give any partial deciſion on the merits of either, to the prejudice of the owners, by attending to the following obſervations on each, aſſiſted by the repreſentation in plate x, the reader will be enabled to judge for himſelf.

In order to render the information complete, concerning each figure of the different axletrees in the plate, they are repreſented with each end or arm in different views: the one end ſhews the axletree and the box whole, and ſeparate from each other; the other repreſents the axletree, with its box, nuts, and caps united, horizontally cut through the middle, for the purpoſe of ſhewing the inſides thereof.

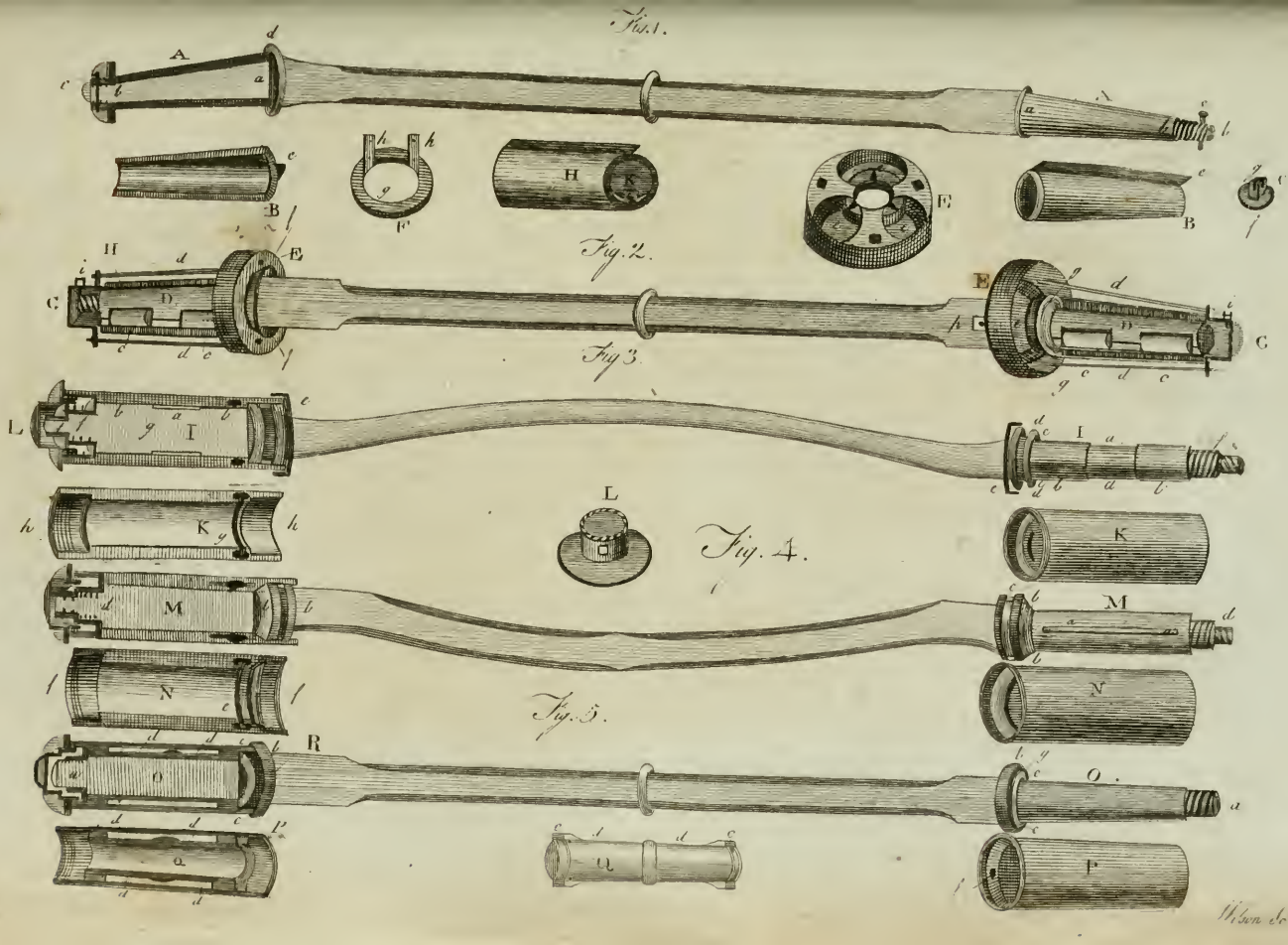
THE COMMON AXLETREE AND BOX.

Fig. 1. The common ſort of axletree and box is moſt generally uſed, being ſimple and cheap, in compariſon with the others; the box is what only wears, and is frequently obliged to be refitted to the arms, otherwiſe they give to the wheel, while in uſe, an unſteady motion, and ſoon exhauſt their ſupply of greaſe. Thoſe, if well fitted, will contain their ſupply for about one week's regular uſe, or a journey of one hundred miles. They wear at the rate of one ſet of boxes to every two ſets of wheels; and require, in that time, to be twice or thrice taken out of the wheels, and refitted to the axletree arms.

A. The arms of the axletree, which are made round, but rather of a conical form; ſtrongeſt at the back or ſhoulders *a*; tapering to the lince end *b*, which is ſcrewed for a nut, and alſo has a ſmall hole for a lince-pin *c*, which prevents the nut from coming off: at the body end is a collar or waſher *d*, for the back of the wheel-ſtock to wear againſt.

B. The box whole and half ſhewn. This box is made of ſheet iron, proportioned in ſubſtance to the weight or ſize of the axletree, having the ſhutting

Plate X



ſhutting edges *e* welded in a ridge, which ſecures the box in the wheel.

C. The nut, which has a broad face *f*, to lie flat againſt the wheel, and is tapped or ſcrewed to receive the ſcrew end of the axletree; each of thoſe nuts turn on the ſcrew the ſame way the wheel goes, and have a notch *g* for the lince-pin to paſs through, for the purpoſe of ſecuring the nut from turning off.

THE PATENT ANTI-ATTRITION AXLETREE AND BOX.

THE advantages which this axletree and box are pretended to poſſeſs over the common ſort, are very great, principally lying in the great relief given to the draught, the retention of oil, the eaſe with which it is repleniſhed, the great ſecurity for holding on the wheels, and their durability. Thoſe axletrees, if made with the ſecurity for the wheels, need no nut or lince-pin, as in thoſe on the common principle.

D. The arm of the anti-attrition axletree repreſented whole at both ends, to give the different views of the reſervoir, the ſtrap waſher, and rollers, with the box on each arm, as horizontally cut through the middle. Thoſe axletrees at bot-

tom are reduced from a perfect round, and grooved to receive two rollers *c c*, on which the weight of the carriage is borne, in order to facilitate the motion. Theſe rollers form the circumference of the bottom of the axletree, which is reduced to make the weight reſt only on them.

E. The reſervoir, or concealment for the oil, being cloſely fitted and fixed by three bolts *d d d*, on the back of the wheel-ſtock; containing the oil within three receſſes *e e e*, which oozes through ſmall channels on to the arm of the axletree, which it ſupplies for a conſiderable time: it is made of caſt metal, and has a cap *f* projecting behind, which prevents the dirt from getting in.

F. The wheel-ſecurity, or ſtrap-waſher; this has a collar *g*, which is placed within the wheel, between the reſervoir and ſtock, and has, fixed to the collar, lugs or ſtraps *h h*, which extend backwards ſome diſtance on the bedded part of the axletree, where it is fixed by a nut-ſcrew: by means of this ſtrap-waſher, the wheel is ſecured to the bedded part of the axletree.

G. The cap, which is alſo fixed on the front part of the wheel-ſtocks by three bolts *d*; and by means of a ſcrew-plug *i*, the axletree and reſervoir is repleniſhed with oil.

H. The box, which is of the ſame form as the common box, only made of a very hard metal, of a thickneſs proportioned to the weight of the carriage;

carriage; this alſo ſhews how the axletree is ſupported on the rollers, and prevented from bearing on the arms.

THE PATENT CYLINDER AXLETREE AND BOX.

Fig. 3. The advantages of this axletree and box over the common ſort, are principally in the length of time they wear; the ſilent and ſteady motion they preſerve to the wheels; the advantage of retaining the oil to proſecute a journey of two thouſand miles, without being once repleniſhed.

Thoſe axletrees and boxes have gone through ſome conſiderable improvements ſince their origin, and have met with ſuch encouragement, that it has induced other perſons to copy them ſo nigh as ſcarcely to admit a deciſion in favour of either, except that experience has proved in the one what can only be ſuggeſted in the other; but, from every circumſtance. they appear to poſſeſs the ſame advantages.

I. The axletree arm, made as perfectly cylindrical as poſſible, and of a peculiar hard ſurface; the middle *a* reduced, to contain the oil neceſſary to feed the axletree at the two bearings *b b*, hav-

ing a ſhoulder *c*, againſt which the wheel-box takes its bearings; the adjoining collar *d* is grooved for a waſher, to preſerve the oil, and prevent noiſe in its uſe, with a rim *e* on the collar of the axletree, to anſwer the uſe of a cuttoo. The end *f* is double ſcrewed, to receive two nuts for ſecuring the wheel; the one ſcrew turns the way of the wheel, the other the reſerve, and is meant as an additional ſecurity to prevent the wheel coming of.

K. The box ſhewn whole, and horizontally cut through the middle, which is made of a very hard metal, nicely poliſhed, and fitted to the arms; having a receſs *g* at the back part, for containing there a ſupply of oil; having back and fore end projections *hh*; the back one fits cloſe to the rim of the collar, which it covers; the fore one projects without the ſurface of the wheel-ſtock, and is ſcrewed on the inſide, to receive the ſcrew of the cap.

L. The cap, which covers the nut, and receives the waſte of oil, is moſtly made of braſs, and ſcrewed on, or in the box, and againſt the front of the wheel-ſtock. This form of cap is uſed to all but the common axletree.

THE

THE NEW PATTERN CYLINDER AXLETREE AND BOX.

Fig. 4. This new invention has ſome ingenious evaſions of the patent, but encroaches ſo much upon its principle as to make it unneceſſary to beſtow further obſervation on them; but where they are different, a ſufficient deſcription is given in the plate; and its references will convey as much information as is conſiſtent with impartiality.

M. The arms, made as perfectly cylindrical as poſſible, of a hard ſurface, having a ſhallow flute or groove at *a* on the top, for the oil to be conveyed to the extremity of the axletree, which it continually ſupplies.

The collar or ſhoulder *b* is made conical for the wheel box to wear againſt, having a ſmall groove alſo at *c*, for receiving a leather to prevent noiſe in uſe; a leather waſher is alſo applied between the box and ſhoulder; it has alſo a double-ſcrewed end *d*, to receive the nuts, which are alſo ſcrewed on reverſe to each other: in the form of this ſcrew there is alſo a little difference made, only as a deviation from the copy.

N. The box ſhewn as whole and horizontally cut through the middle. This box is alſo made of a very hard caſt metal, nicely fitted and poliſhed

ed within. The receſs for the oil at *e* is the ſame with the laſt, as alſo are its projections *f* for the ſame purpoſe exactly, except the back ſhoulder, which is bevelled to fit the conical collar.

THE NEW PATTERN AXLETREE, WITH DOUBLE CASE BOX.

Fig. 5. This new invention, the novelty of which lies in the box, is for the ſame purpoſes as the two laſt, to contain a ſupply of oil, and wear perfect for a greater length of time, than the common axletree and box. This, in the conſtruction, differs much from the reſt, but the want of time to prove its ſufficiency prevents any certain recommendation.

O. The arms of this axletree are made in the ſame manner as the common ſort, but caſe hardened, with a ſingle ſcrewed end *a*, having a braſs collar *b*, with a deep groove *c*, to receive the projecting end of the outward caſe box which runs therein, and prevents dirt getting between the axletree and box.

P. The outer box or caſe, with the wearing box within, repreſented whole, and horizontally cut to ſhew the principle of it.

Q. The inner or wearing box ſhewn apart, previous to fixing it in its caſe. This box is made caſe hardened on the inſide, and fits cloſely to the axletree arms; they are made ſhorter than the caſe or outer box, to admit the projection *b b* at each end for the ſame purpoſes as the laſt, having two collars or bearings *c c*, which fit cloſe to the inner ſurface of the outer box, between which two bearings and boxes at *d d* the oil is contained, which oozes through two ſmall holes *e*, at the back end of the box, on to the axletree arms.

Theſe two boxes, after being made ſeparate, are welded or brazed to each other; the oil is ſupplied at the back through a ſmall hole *f*, which is plugged with a cork or ſcrew.

R. The collar, made of braſs, is fixed on the back part of the axletree arms, having a groove *g*, in which the back projection of the outer box is to run, for the purpoſe of preventing dirt from getting in.

Each of thoſe three laſt axletrees have peculiar wrenches to take off the nuts and caps with, and which are always included in the price with them.

PRICE

PRICE OF AXLETREES.

THE value of common axletrees and boxes is neceſſary to be known apart from the carriage, that any alteration for thoſe of the patent ſort may ſhew the exact difference of expence, whereby the preference may be judged of with more certainty. The common axletrees are valued by their weight, which, from each ſize to the other, leſſen about one-tenth—from the large coach to the ſmall phaeton, in proportion to the former ſtatements of carriages. The other ſorts of axletrees are not ſo regularly reduced in the prices, but are ſtated according to the fancy of the proprietor. The value of the boxes are included with thoſe axletrees, but not with the common ſort; when new boxes become neceſſary, the prices of them, and putting in the wheels, are ſtated ſeparately.

FOR A FOUR-WHEELED CARRIAGE.	Coach.			Chariot.			PHAETONS. Large.			Middle.			Small.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
Axletrees, per pair	3	10	0	3	3	0	2	17	0	2	12	6	2	7	0
Boxes, per ſet	1	16	0	1	12	0	1	10	0	1	8	0	1	6	0

FOR A TWO-WHEELED CARRIAGE.	Curricle.			Gig.			Whiſkey.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
Axletrees, each	1	15	0	1	11	6	1	8	0
Boxes, per pair	0	15	0	0	14	0	0	13	0

The patent and new-pattern axletrees and boxes are reduced in their expence to three ſizes only—the coach, chariot, and phaeton; but in this the proprietors are not all regular in the allowance, ſome charging the ſame price for the axletrees and boxes of a phaeton as others do for thoſe of a chariot: they however all allow the ſingle axletree, for curricle, gig, or whiſkey, to be regularly half the price of the cheapeſt pair. The ſtatement is nearly as follows:

	Coach.			Chariot.			Phaeton.			Single for Gig		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
Patent anti-attrition axletree, per pair	21	0	0	20	0	0	19	0	0	9	10	0
Patent cylinder, — ditto	27	16	0	26	5	0	26	5	0	13	2	0
New pattern, — ditto	23	0	0	22	10	0	22	0	0	11	0	0
New pattern, with double box, ditto	26	10	0	26	10	0	24	10	0	12	4	0

By this ſtatement, the value of any change of axletrees to a new carriage is known. The alterations to old carriages for any pattern, muſt have the expence of taking out and putting in added.

SECT. 3.

CRANES.

CRANES are the ſtrong iron bars to which the hind and fore part of a carriage on each ſide are united. They are made of a crooked form, reſembling, at the fore part, that of a crane's neck, for the purpoſe of admitting the fore wheels to paſs under unobſtructed, whereby ground is ſaved in turning, which gives to carriages made with them a great advantage, as they can be uſed with more freedom in narrow, confined places, and have alſo a great ſuperiority in the appearance, in any handſome carriage. They require to be manufactured of the beſt materials and workmanſhip, as they ſupport, like the perch, all the weight of the body: they are different in their forms, which makes alſo a difference in their price, and which has before been ſtated under the head of Crane-neck Carriages in page 67, which makes it quite unneceſſary to give any further account of them than what is repreſented in Plate IX. Fig. 12, 13, and 14.

Fig. 12. The double-bowed crane, having the hind part ſhaped in imitation of the fore part, which fills up the vacant ſpace behind, and forms a more agreeable line to the ſhape of the body.

Fig.

Fig. 13. The half-bowed crane, bent on the hind part to imitate the double bow, which bend extends to a bearing on the axletree-bed.

Fig. 14. The common crane, having only the neceſſary bend for the wheel to lock under, from which bend it continues almoſt ſtraight to the hind end.

SECT. 4.

STAYS.

STAYS are iron bars, variouſly formed, and of different deſcriptions, taking their name from the eſſential part which they are meant to ſupport: ſome of their bearings are by collars, and then are called collar-ſtays, alſo when a collar is wrought in the middle of a bar for ornament. Their uſe is very great, to confine or ſupport any two ſeparate parts of the carriage, which is done by being wrought with collars, ſhoulders, clips, or ſpurs, and are confined by bolts to their ſituations: there are many of theſe ſtays which are called irons, which are leſs neceſſary to ſupport, and take their name from the parts to which they are applied; of which ſome are lightly fixed, and others are only frames for leather coverings, &c.

Thoſe

Thoſe being articles of iron-work which form a part of the carriage, are included in their value; all that is neceſſary, is to repreſent them in the plate, and explain their uſe. When any of them require to be repaired, or replaced through failure, the prices will be found under the general article of Repairs.

The ſpring ſtays are all repreſented in plate x. with the ſprings, ſhewing how they are ſupported at the hoop, and likewiſe the manner of fixing the ſtays to the oppoſite reſting-bar, with clips, flaps, or cups.

PLATE X.

A. The bottom or main ſtay of a curricle or one-horſe chaiſe; it ſupports the ſhafts from the axletree, to which it is alſo confined, is fixed on the bottom of the ſhafts, and unites the bars by means of lugs or clips croſſing the joint.

B. The horn-bar ſtay, which, bolted at the middle, on the bottom of the perch, is carried up to the end, and fixes to the horn-bar, which it ſtrengthens, to ſupport the preſſure of the ſpring ſtays.

C. The coach-box ſtays: the ſtraight one is the back or ſtandard ſtay; the crooked one, the

compaſs or foot-board ſtay, which ſupports the foot-board: the other prevents the coach-box from coming forward, by being bolted to the horn or budget bar.

D. The hind ſtandard ſtays, are the ornamental guard-irons fixed on the hind part of the carriage; the back and front ones are ſometimes both of one ſhape; their uſe is to ſupport the upright ſtandards, to form a part of the ornament, and prevent other carriages coming too cloſe behind.

E. The ſeat-irons, by which the coachman's ſeat is ſupported and fixed by means of a cradle, which ties or buckles on to the loops at the ends; they are fixed in the ſtandard at the top, and are hooped and bolted thereto.

F. A luggage-iron, or budget-frame; this frame, after being bolted on to the bottom of a platform, is covered all over with leather, and forms the ſide of the boot.

G. The daſhing-iron; a frame for a gig or curricle, which is covered with leather for the purpoſe of avoiding ſplaſhing in travelling; it is bolted through the fore bar, and is generally ſupported from the back by two ſtays, having loops at the ends for aſſiſtance to mount by.

H. The wheel-irons, of different ſhapes, the ſtraight and compaſſed. The compaſs wheel-irons are for the purpoſe of forming a ſtep or

tread for the coachman to mount on; the ſtraight ones are uſed to poſt-chaiſes; their uſe is to ſtay the ſplinter-bar where the draught is taken from, and to which it hooks on at the ſocket eye, and fixes on to the axletree end againſt the wheel, where it is ſecured by the axletree-nut.

I. The wing iron, or frame for the wings of a chaiſe, which is covered with leather, and fixes on the elbow-rails.

K. A head frame, to which the head of a chaiſe is fixed, when intended to be taken off occaſionally.

SECT. 5.

PLATES.

PLATES are material articles of the iron-work, as they add to the ſtrength and preſervation of the timbers; in particular where they are curved, or where any two parts wear againſt each other.

L. The perch ſide-plate, of which there are two to a perch, are fixed on to the ſides of the timber, to which they are ſecured by rivets: they admit the timber to be reduced, which gives a much lighter appearance to the carriage, and pre-

vents it from ſettling by the weight of the body, as the other perches will do.

M. A bottom-plate, which is bolted flatways to the bottom of the perch, to aſſiſt the timber in its ſtrength; thoſe are not uſed with ſide-plates, but a ſhort piece, called a wearing-plate, is fixed on the bottom of every perch for the ſway-bar to wear upon.

N. The tranſom-plates, of which there are two, are made fluſh to the top of the fore axle-tree-bed, and to the bottom of the fore tranſom, to ſtrengthen and preſerve the timbers from wearing by the friction they are neceſſarily ſubjected to in turning of the fore carriage.

O. The half-wheel plate; a flat, ſemicircular plate, horizontally placed, and united with the fore tranſom-plate, and is caſed on the top of the circular part with a wood moulding; its uſe is to maintain a ſteady bearing to the locking of the fore carriage.

P. A whole-wheel plate; a circular plate, horizontally placed between the fore bed and tranſom; it is ſufficient in its bearings without a top tranſom-plate, as it preſerves an equal bearing on any lock of the fore carriage; a ſmall wearing-plate is neceſſary on the centre of each bed. Thoſe wheel-plates are always uſed to crane-necks, and frequently to the better ſort of perch

carriages; they are caſed on the top like the half-wheel plates, with a wood moulding.

Q. The ſway-bar plate; ſometimes uſed to ſtrengthen the ſway-bar, and preſerve it from wearing by its friction againſt the wearing-plate of the perch, but is ſometimes wholly omitted, or has leather ſubſtituted in its place.

R. The noſe-plate, which is a ſhort plate bolted and clipped acroſs the bottom of the futchels, to keep them ſtiff for the pole, which reſts alſo on it.

S. The ſtandard-plates, are plates bolted on the back and front of the coach-box ſtandards at the bottom; they clip, and are fixed to, the tranſom: by means of theſe plates the coach-box is fixed: the plates ſometimes extend up to the bottom of the ſtays, to ſtrengthen them.

T. The croſs-key plate, is bolted acroſs the top of the futchels, and preſerves their ſtrength againſt the ſtreſs of the pole, which it ſupports at the back end, in a contrary direction to the noſe-plate at the fore end.

U. The boot door-plate, a broad, thin plate, which is ſcrewed over the ſhutting edges of the door, as a rabbit to ſhut againſt.

V. The futchel-plate, a thin, ſquare plate ſunk in a level with the chap of the futchel, to preſerve the hole from wearing by the pole-pin.

W. The

W. The pump, or guard-handle plate, is a plate ſcrewed on the bottom of the timber to ſtrengthen it.

X. The ſhort-block plate, is a plate for the ſame purpoſe as above.

Y. A corner-plate, a bent iron uſed to ſtrengthen the joints of any framing.

SECT. 6.

SOCKETS OR CAPS,

ARE iron ferrules, fixed on the ends of the timbers, either for ſtrength, or for inſtruments to draw by.

Z. The ſhaft-ſockets; are ſockets wrought in the bottom plate of the curricle-gig for the ſhafts, which are occaſionally uſed for one horſe; they are placed in thoſe ſockets, and confined by a ſcrew.

a. A ſplinter-bar ſocket, moſtly made with an eye, wrought from the ſolid, in which the wheel-iron is hooked.

b. The ſmall ſplinter-ſockets, ſhewing the hook, the eye, and dragon's-tongue, which are for one and the ſame uſe, that is, to fix the traces to, for the purpoſe of drawing by.

c. The pole-cap or ring, is a ring-ſocket fixed to the extreme end of the pole, with loops for the pole-pieces, which are placed therein.

SECT. 7.

HOOPS AND CLIPS,

THOSE are uſed for uniting two ſeparate things together, in order to ſtrengthen each other; the hoops confine them by being forcibly driven on, and the clips by being fixed with bolts; they are made of tough, thin iron, and formed to the ſhape of what they are deſigned to unite.

d. A perch hoop, which unites the wings to the perch, by being tightly drove over them.

e. An axletree-hoop, which is forcibly drove on the axletree and bed, to confine them together at the ſhoulders.

f. A clip which is placed over the axletree, and ſecures it in the bed to which it is bolted, and is alſo uſed for other purpoſes.

g. A clip, which ſecures the ſhafts of a one-horſe chaiſe to the fore-bar, through which it is bolted.

SECT.

SECT. 8.

BOLTS, NUTS, AND SCREWS.

THOSE are the principal inſtruments by which the timbers and iron-work are confined to each other: they are made of various lengths and ſizes, but moſtly of half an inch diameter, and of differently-formed heads, faſtened by a ſcrew or nut at the bottom; which nuts are proportioned to the ſize of the bolts, and are of a ſquare form, in general, to be ſcrewed on by a wrench; ſome are made for temporary purpoſes, to be ſcrewed on with the finger and thumb, and are called thumb-nuts; ſometimes a ſcrew with a ſtrong thread, and a head made like a nut, ſupplies the place of a bolt, and is called a nut-headed ſcrew.

h. A perch-bolt; a ſtrong, iron pin which goes through the centre of the fore axletree-bed and fore tranſom, and is what the fore or under carriage is ſecured by to the upper one, and by which bolt the carriage turns and is drawn; a ſmall key or pin goes through the bottom, or it is otherwiſe ſecured by a ſcrewed nut.

i. The common bolt, which receives a ſcrewed nut at the bottom, and is uſed to fix moſt of the work together.

j The common nut, which ſcrews on to the bolt, and what it is faſtened by.

k. A collar-bolt; a bolt with a ſhoulder or collar in the middle and double-ſcrewed ends, which ſerves to fix one thing upon another, that either may be ſeparately taken away without diſplacing the other.

l. A ſtrap-bolt, with a thumb-nut, having a flat part with holes, by which the bolt is fixed to the ſide or top ſurface of any timber, and is moſtly uſed to ſecure the door or lid of boots.

m. A pole-pin; a round, iron pin with a flat head, by which the pole is kept in its place.

n. A ſplinter-bar roll, or roller-bolt, a long bolt with a large, round, flattiſh head; the upper part is fixed through a roll of three inches deep, and two diameter, leaving the bolt of ſuch a length as to fix through the ſplinter-bar and futchel, or ſplinter-bar end only; its uſe is to receive the traces by which the carriage is drawn.

o. A tee-headed bolt, with a thumb-nut, is a bolt with a head made in the form of a T, to faſten the ends of a ſhort brace between two ſeparate things, which is done by contracting the brace in the middle; moſtly uſed to the bar of a curricle or chaiſe, to hang the ſplinter by.

p. The bolt hook and eye, are two bolts having projections from their ſhoulders, one of which is wrought in a hook, the other in an eye, to receive

ceive it: they are uſed to ſeparate things which occaſionally hang together; moſtly uſed to the ſhafts of a one-horſe light phaeton.

q. A nut-headed ſcrew; a large, thick ſcrew, with a ſtrong thread, to hold well in the timber, and a thick, ſquare head, in the form of a nut, to be ſcrewed on with a wrench: they are of various lengths and ſizes, and their uſe is to fix any two ſtrong parts together.

r. A trunk-faſtener, is a ſtrong ſcrew, with a collar and ſquare head, uſed for the purpoſe of keeping a trunk ſteady on the platform.

SECT. 9.

RINGS, STAPLES, LOOPS, AND SHACKLES.

THESE are inſtruments by which other things hang or are confined: their form and ſubſtance vary very much from each other, according to the ſeparate purpoſes for which they are intended.

s s s. The body-loops, made to various patterns, to fix at the bottom corners of the body, by which it hangs to the ſpring: they are made of a ſtrong ſubſtance, and are wrought with a ſquare loop to receive the main brace.

t. A body-loop for a gig, which hangs from the pillar, through which it is bolted, having a ſpur

or ſtay without, and a ſtrong ſtay within, to preſerve the pillar.

u. A ſhackle, which bolts on to the top of the ſprings, to which it hangs, and receives the brace from the body-loop.

v. The body-loop, with ſtay and ſpring, united: moſtly uſed to a ſtep-piece body.

w. A double and ſingle collar-brace ring; the double ring is made with a ſquare loop at each end to receive the collar-brace, and is fixed on the top of the perch; the ſingle ring is made with one loop, and fixes to the bottom of the body.

x. A check-brace ring; a ring made with a ſtrong ſcrew, to fix in the middle of the corner pillar for the check-braces to loop through.

y. A pole-ſtaple; a large, iron ſtaple drove into the top of the pole at the back part, and which receives the gib to keep the pole tight.

z. A breeching-ſtaple; a ſtaple which ſcrews in the ſhaft: it uſe is to receive a breeching-ſtrap of a one-horſe harneſs, to which it is buckled.

1. A ſhaft-hook and a ſhaft-tug, two things which are meant for the ſame purpoſe; that is, to receive the bearing-tugs of a one-horſe harneſs.

2. A pole-hook, a ſtrong, long hook, fixed on the end of a pole, by means of two bolts in a plate: its uſe is to hang the middle ſplinter-bar to, when four horſes are uſed.

3. A Jug-

3. A lug-hook, which is a plate turned at the top, having holes on the ſides to ſcrew it to the ſide or end of a trunk, by which it hangs.

SECT. 10.

JOINTS AND PROPS.

BY joints is to be underſtood the iron-work by which the heads of chaiſes, landaus, phaetons, &c. are fixed up or let down; and the props are what the ends of thoſe joints are fixed upon and ſupported by.

4. A joint for a landau head, which is fixed on two props only.

5. The joint for a chaiſe or phaeton head, which is obliged to be double, and fixed on three props.

6. The bottom, top, and middle props, for the joints to be placed on, and which are ſecured by a nut: the bottom prop ſuſtains the main purchaſe, and is the ſtrongeſt.

7. The neck-plates, which are ſeparate, thin plates, made to ſcrew on each of the flats; they are all placed on each ſide a bolt, on which the head is made to act.

SECT.

SECT. 11.

STEPS.

THE ſteps in this repreſentation are only thoſe of neceſſity, and which are included in the value of the carriage already mentioned. The double and treble ſteps, requiring more than the iron-work to make them complete, are hereafter treated on, and their ſeparate value affixed.

8. A footman's ſtep; this ſtep is fixed to the hind part of a carriage, having a back ſtay thereto, to ſtrengthen it.

9. Single ſteps to a one-horſe chaiſe carriage, &c. having alſo the ſtays, ſhewing the two principal forms they are made in.

MANY of thoſe articles of iron-work are unconnected with the bodies and carriages already ſtated; but they compoſe a part of the additional and following requiſites, in which their value is alſo included; ſuch as the boots, coach-boxes, &c.; but they are here repreſented, to make the knowledge of them more complete.

CHAP.

CHAP. VI.

WHEELS.

UPON the ſuperior advantage given to the motion by the different heights of the wheels, opinions are frequently divided; ſome maintaining the large, others the ſmaller wheel. On ſmooth ground the ſmaller wheel moves quicker than the large; but on a rough or uneven ſurface, the large wheel has the preference, as it will eaſily overcome the reſiſtance which obſtructs the ſmall one.

Wheels ſhould be made, to four-wheeled carriages, as near of a height as the conſtruction and appearance will admit; and if not required for heavy work, the lighter they are made the better. The fixtures, from whence the draught is taken, ſhould be placed rather above the centre of the largeſt wheel, for advantage of draught.

The members of a wheel are of three deſcriptions, viz. the nave, the ſpokes, and the fellies. The nave is the ſtock, made of elm, in which all the ſpokes are fixed, and in which the axletree or wheel-box is confined, to receive the axle-arm.

arm. The ſpokes are ſtraight timbers, made of oak, firmly tenoned in the nave, and are the ſupport of the fellies or wheel-rim. The fellies, made of aſh or beech, are the rim of the wheel, which is divided into ſhort lengths, in the proportion of one to every two ſpokes: thoſe are fixed on the ſpokes; and, on them, the iron or ſtrakes, which maintains the wear, are nailed.

The height of the wheels regulates the number of ſpokes and fellies that they are to contain; as the larger the circumference of the wheel is, the number of ſpokes required is greater in proportion; they ſhould not be, to any wheel, more than fifteen inches apart on the fellies between the ſpokes.

The uſual height of wheels extends to five feet ſix inches, and are divided in four proportions, to contain from eight to fourteen ſpokes, and only half that number of fellies; and are reckoned eights, tens, twelves, or fourteens, which are the number of ſpokes in a wheel, or fellies in a pair. The height, which regulates the number, is, for an eight-ſpoked wheel, not to exceed three feet two inches; for a ten, four feet ſix inches; for a twelve, five feet four inches; for a fourteen, five feet ſix or eight inches. Theſe are the extreme heights for the different number of ſpokes to each wheel, which ſhould be rather more than leſs, in particular to the fore wheel of a four-wheeled carriage, which

Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.
Fig. 5.
Fig. 6.
Fig. 7.
Fig. 8.
Fig. 9.
Fig. 10.
W. Wilson, sc.

which receives more ſtreſs than the hind one; and the rule is, when the hind wheels are of that height to require fourteen ſpokes, the fore one, if under the neceſſary height before ſtated, ſhould have twelve; never allowing the fore wheels to have but two ſpokes leſs than what is needful for the hind ones.

There are three deſcriptions of wheels, viz. the ſtraked, the hooped, and the patent rim: the difference of either is only in the rim; ſo that in wheels there are four heights, and three ſorts, which make twelve different prices in the whole, ſuppoſing them all of one ſize; but as they are made lighter for phaetons and chaiſes than for coaches and chariots, the prices vary accordingly.

PLATE XI.

Fig. 1, 2, 3, and 4, are wheels of four different heights, ſhewing the number of ſpokes each wheel ought to contain, and the difference of the three ſorts now generally uſed, the hoop, the ſtrake, and patent rim.

Fig. 1. A hooped wheel, called an eight, made with fellies, and hooped on the rim with an entire piece of iron.

Fig.

Fig. 2. A ſtraked wheel, called a ten, made on the common principle, with fellies, and the iron rim made in ſhort lengths, called ſtrakes.

Fig. 3. A hooped wheel, called a twelve, with fellies, and a hooped rim of one entire piece.

Fig. 4. A patent wheel, called a fourteen; this is the patent rim, made of one piece of timber, ſhewing the nuts and bolts with which the rim is faſtened.

Fig. 5. The nave, or ſtock, which is the centre of the wheel, in which the ſpokes are fixed.

Fig. 6. The ſpoke, which fixes in the ſtock, and ſupports the rim.

Fig. 7. The felly, ſhewing the pins or dowels on the end, by which it is kept ſecure at the joints.

Fig. 8. The ſide view of a ſtraked wheel.

Fig. 9. The ſide view of a rimmed hoop wheel.

Fig. 10. The ſtrake, which is the ſhort iron with which the common wheel is rung.

THE

THE PATENT OR BENT-TIMBER WHEEL,

HAS the rim of one entire piece, bent to the circle, inſtead of ſhort lengths, or fellies, which are hewn to the ſhape; the ſtrength of the bent timber is preſerved while the other is deſtroyed; beſides, it is hooped with iron, inſtead of being ſhod with ſtrakes, and will often laſt twice the time longer in wear than the others will do, has a much lighter and neater appearance, and on that account is often preferred.

The mock patent, or hooped wheel, comes very near the others in appearance and uſe, particularly if made with aſh fellies; as the preſervation of both lies in the hoops that the wheels are rimmed with. It is compoſed of part patent and part common, having the timber the ſame as the ſtrake, and the iron as the patent wheel.

The common ſort of wheels are preferred by many of account of their being more eaſily repaired than the hooped or patent wheel, which is certainly right; but, though the repairing of them is more difficult, yet they are much leſs ſubject to need it.

PRICE OF WHEELS, PER PAIR, OR SET.

Number of Spokes to each Wheel, or Fellies in the Pair. Fore Wheels.	Hind Wheels.		Straked. £. s. d.	Hooped. £. s. d.	Patent. £. s. d.
Sets. Twelves and Fourteens	Fourteens	COACH	7 10 0	8 10 0	11 11 0
Twelves and Fourteens	Fourteens	CHARIOT	6 16 6	7 17 6	10 17 0
Twelves and Fourteens	Twelves	LARGE PHAETON	6 12 0	7 12 0	10 12 0
Tens and Twelves	Twelves	MIDDLE-SIZED DITTO	5 11 0	6 6 0	7 7 0
Eights and Tens	Tens	SMALL DITTO	4 10 0	5 5 0	7 0 0
Pairs. Fourteens	Fourteens	CURRICLE	3 10 0	4 4 0	5 15 6
Twelves	Twelves	GIG	3 2 0	3 14 0	4 14 6
Tens	Tens	WHISKEY	2 11 0	3 3 0	4 0 0

When the fellies, or rims of wheels, are moulded, which they ſometimes are, an additional charge muſt be made. In general, the various heights of wheels regulate the extra charge; but, when required to be made much heavier for a coach or chariot, a proportionate addition in the price muſt be made of 18*s. in the ſet.*

	Coach, Chariot, or large Phaeton. £. s. d.	Middle or ſmall-ſized Phaeton. £. s. d.	Curricle, Gig, or Whiſkey. £. s. d.
For moulding the fellies	0 19 0	0 17 0	0 10 0
Heavy wheels for a travelling carriage	0 18 0	— —	— —

Thoſe prices do not include the painting, for the difference of which ſee *Supplement*, page 49.

SECT. 1.

BOOTS OR BUDGETS.

BOOTS and budgets are moſtly underſtood as one article, though ſo differently called: they are all intended for one purpoſe, which is that of carrying luggage, and are moſtly fixed on the fore part of the *carriage*, between the ſprings: that wherein the principal difference lies, is made with a looſe cover, and is properly the budget, being made convenient for trunks; thoſe budgets, for travelling carriages, or common poſt-chaiſes, are, by far, the moſt uſeful; the others are boots, of a trunk form, made more ſquare, and are moſtly uſed for town carriages, but can be of no other advantage than that of carrying looſe hay, horſe-cloths, &c. From one or other of theſe boots, conveniencies are ſometimes made for the ſubſtitute of a coach-box, to ſave labour to the horſe when the carriage is uſed for poſt-work, or to preſerve the view from within uninterrupted by a coach-box and hammercloth.

Boots are frequently uſed at the fore end of phaetons, and then moſtly have the fore ſprings fixed thereto by means of carved blocks, which are bolted to their ſides, and uſually have the ſtep

for the entrance to the body fixed or hung thereon. Boots and budgets are ſometimes uſed to the hind part of travelling carriages, but more frequently uſed to the hind parts of phaetons, gigs, or curricles, and are of two ſizes leſs than what are uſed to coaches or chariots; they are all ſo near in form as to make the deſcription given in the plate ſufficient for the general purpoſe of information.

PLATE XIII.

Fig. 1 and 4. Are the common, ſquare, japanned boots, moſtly made of thick elm, and covered with ſtrong ruſſet leather, welted round the ſides, opens in the front with a door, which has an iron plate ſcrewed round the edges for it to ſhut againſt, and is faſtened by means of a bolt and thumb-nut, or private lock.

Fig. 2. A platform, or luggage boot, made as the ſkeleton is repreſented in Plate VII, with iron-framed ſides, which are here, in Plate XIII. repreſented covered with a ſtout black-dreſſed leather, over which the caſe or cover, made of the ſame, is placed, and buckles to the ſides, back, and front; the borders of which ſhould be welted to the top-piece, as they fit much better than when made of one piece of leather, as they

ſometimes are. Within thoſe budgets are ſtraps fixed to the bottom, to confine whatever is placed in them, which otherwiſe would be injured by the motion of the *carriage*.

Fig. 3. A boot made with a convenience for the coachman to ſit on to drive; this boot requires to be made much ſtronger than the others, owing to the weight of the man, and, to make it eaſy to him, may be hung upon ſprings, as repreſented; which ſprings alſo carry the body. This boot ſhould be framed of ſtrong aſh, and boarded for the leather, with half the top to throw up to a perpendicular poſition by means of two irons of a ſemicircular figure, which run in a groove or ſtaple fixed in the framing, and are confined, when up, by a thumb-ſcrew on each ſide; on the inſide of the top is made the ſeat, which takes up but little room in the boot when down; the front lets quite down, but is ſtayed, to anſwer the uſe of a footboard, by means of two hinged, flat ſtays fixed by the ſame ſcrews as the irons are; it is faſtened, when down, by the bolt on the front paſſing through a plate on the top, and ſecured by a thumb-nut; thoſe are readily placed, and ſhould have a door to open behind, if the ſeat is to be made fixed.

Fig. 4. A phaeton boot; this boot is made ſimilar to Fig. 1, but not of ſo ſquare a form, but is obliged to be made rather ſtronger, on ac-

count of receiving the weight of the fore part of the body, which is fixed to the ſprings that are bolted on blocks to the ſides; this has always a ſtep on the ſides, from which, ſometimes, other ſteps are to hang; they ſometimes open at the top, and ſometimes at the back or fore ends.—*For the Saliſbury Boot, ſee Coach-boxes.*

Coach, chariot, and large phaeton boots or budgets, vary ſo little in their ſize as to make the difference in value not worth notice: the ſizes beneath thoſe are two, and are uſed to gigs, curricles, middle and ſmall-ſized phaetons; ſo that, on the whole, they may be conſidered as of three proportions, which uſually are as follow:

	Long.	Wide.	High.
Large ſize,	3 ft. 0 in. ——	2 ft. 3 in. ——	1 ft. 6 in.
Middle ſize,	2 ft. 3 in. ——	1 ft. 8 in. ——	1 ft. 3 in.
Small ſize,	1 ft. 6 in. ——	1 ft. 2 in. ——	1 ft. 0 in.

PRICE,

PRICE OF BOOTS AND BUDGETS.

	Large.			Middle.			Small.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
A platform or luggage budget, as Fig. 2. — —	8	0	0	6	0	0	4	0	0
A trunk-boot, as Fig. 1 and 4	5	0	0	3	10	0	2	10	0
A framed trunk-boot, to open with a ſeat for the coachman, as Fig. 3 — —	10	0	0	9	0	0	8	0	0
A ditto framed, for a coach-box to be placed on, as in Plate XIV. Fig. 3. — —	6	0	0	4	6	0	3	3	0

Thoſe are ſuppoſed to be all made on one and the ſame principle, only reduced in their ſizes, and the ſtatement will anſwer to every kind of carriage; and any that come within or between thoſe ſizes may eaſily be aſcertained hereby: but if any of the platform-budgets are made with wood ſides, inſtead of iron frames covered with leather, as the ſmall boots frequently are, then one-fourth may be deducted from their value.

CHAP. VII.

PLATFORMS, OR RAISED HIND AND FORE ENDS, AND BLOCKS.

THOSE platforms, raiſers, or blocks, are added to a *carriage*, either as matter of neceſſity or appearance, but moſtly for appearance, being generally ornamented with carving in different degrees; their uſe is to elevate and ſupport the budget, boot, hind foot-board, and ſprings; they are generally placed on the ſide of the carriage, and relieve the inſide framings from being obſcured by the platforms, as they are lightened and moulded, and give to the carriage a more airy appearance: being of various deſigns, they are all omitted from the former charge of the naked carriages as ſtated, ſo that any deſcription may be added according to fancy.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

Fig. 8.

Fig. 9.

Fig. 10.

Fig. 11.

Fig. 12.

Fig. 13.

Fig. 14.

Meriden Co.

SECT. 1.

RAISED HIND ENDS, PUMP HANDLES, AND SHORT BLOCKS.

Fig. 8, 9, 10, 11, 12, 13, 15. Thoſe different ſorts of hind ends are for one and the ſame uſe, viz. for relieving the platform or footboard from the hind framings to whatever height is neceſſary: the difference is, that the pump, plow, or guard handle, (Fig. 9, 11, and 12) are made to extend in the form of one of thoſe handles mentioned, and are ſtrengthened by iron plates; theſe ſerve for the ſervant to help himſelf up by, and to keep the horſes of other carriages from coming too near to do injury to the pannels. The ſhort blocks (Fig. 8 and 10) are what are uſed to poſt-chaiſe *carriages*, or to ſupport a platform for ſtandards; they do not extend further from the hind ſpring-bed than what ſerves to ornament them.—The phaeton and chaiſe blocks (Fig. 15) are of various forms. If the hind end is narrow, with two bars only, they are made like the ſhort blocks; but, if wide, for long ſpring blocks, they extend to the furtheſt bar to fill up the great ſpace, and form a large platform for a trunk, &c. to be placed on occaſionally.

SECT.

SECT. 2.

RAISED FORE ENDS, OR FORE BLOCKS.

Fig 5, 6, and 7. Thoſe fore blocks are the ſame to the fore ends, as the others are to the hind ends, to raiſe the budget or boot, and relieve the framings, in order to aſſiſt the appearance of the fore part of the carriage: thoſe moſtly have their bearings acroſs the framings between the ſprings; there is alſo a fore bar, on which one of the bearings reſts, that is frequently called a block, but can only be conſidered a block when ornamented to anſwer the ſides; it bears a proportion in value of about one-fourth of the other two; ſo that, when omitted, it may be deducted from the amount given, which includes it.

SECT. 3.

SPRING BLOCKS.

Fig. 13 and 14. Spring blocks are of two ſorts, which materially differ from each other; the one is to raiſe the hind ſprings, the other the fore ones; and, like the others, are more or leſs ornamented; but thoſe repreſented are of the largeſt

largeſt and ſuperior kind, from which they may be reduced to any pattern. Long blocks or platforms are frequently fixed between them when a hind budget is not uſed, for the purpoſe of filling up a large vacancy acroſs the bars.

SECT. 4.

CUSHIONS AND STANDARDS.

Fig. 11 and 12. Footman cuſhions were intended to make the ſituation of the ſervant more comfortable, but are now ſeldom made otherwiſe than in the form of a cuſhion, with boards only, covered with leather, without any ſort of ſtuffing, to make them more eaſy than a common foot-board: their chief uſe is to raiſe the footman, and to ornament the *carriage*, particularly when ſtandards and wings are added to them, which are alſo aſſiſted in their ornament and ſtrength with the irons that ſupport them. The carving introduced in thoſe ſtandards is alſo a great addition to their appearance; and they are at preſent the principal ornaments to the hind part of a *carriage*. Their advantage, beſides ornament, is to prevent other carriages coming ſo cloſe behind as to injure the ſervant or pannels.

PRICE

PRICE OF RAISED HIND AND FORE ENDS, BLOCKS, STANDARDS, AND CUSHIONS.

THOSE articles are the ſame in value whether to a coach or chariot *carriage*, for which they are principally uſed. The difference in their price ariſes from the manner in which they are ornamented; and to ſtate them finiſhed in the three different ways, as are repreſented in the plate, will furniſh ſufficient information of the general variety now in uſe.

	Plain Moulds. £. s. d.	A little ornamented. £. s. d.	Much ornamented. £. s. d.
Fig. 9 and 11. A pair of pump, plough, or guard-handle blocks and footboard — —	2 0 0	3 0 0	4 0 0
Fig. 8 and 10. A pair of ſhort blocks and footboard —	1 10 0	2 5 0	3 0 0
Fig. 5, 6, and 7. A pair of raiſed fore end or budget blocks	1 10 0	2 10 0	3 10 0
	Plain.	Plated round the top.	Plated top, bottom, and corners.
Fig. 11. A footman-cuſhion only	2 2 0	2 18 0	3 16 0
Fig. 12. A footman-cuſhion with hind ſtandard — —	6 0 0	6 18 0	7 18 0
	Large.	Middle.	Small.
Fig. 13. A pair of hind ſpring-blocks for a phaeton —	4 4 0	3 3 0	2 2 0
Fig. 15. A platform for ditto raiſed with blocks —	1 10 0	1 5 0	1 0 0
Fig. 14. A pair of fore ſpring-blocks only — —	1 0 0	0 15 0	0 10 0

With thoſe articles, the expence of putting them on, and the materials uſed, are included in the above ſtatements.

CHAP.

CHAP. VIII.

COACH-BOXES.

A HANDSOME coach-box is a great ornament to a carriage. Of theſe there are various ſorts now introduced, inſtead of riding poſt, to ſave unneceſſary burden to the horſe, and fatigue to the driver, which are two very material objects. The objection by many perſons to a coach-box, is the obſtruction it gives to view; but they may be ſo adapted as not materially to affect the ſight from the front windows; and any convenience, however ſimple, is by far better than fatiguing both man and horſe; but, to carriages uſed in town, a ſubſtantial coach-box is indiſpenſably neceſſary, as it affords ſo material an advantage to the driver; nor is the view from the front ſo great a matter of concern as if intended for country uſe.

SECT. 1.

STANDARD COACH-BOX.

Fig. 1. This coach-box is the moſt general and ſimple in uſe, as it is light, and convenient to remove on any occaſion; it is moſtly preferred for thoſe carriages that are alternately uſed for town and country: they are ſimply fixed by means of plates, which clip the tranſom, and are ſtayed on the hind or boot bar, and fixed with collar-bolts.

SECT. 2.

THE SALISBURY COACH-BOX.

Fig. 2. The Saliſbury boot, though of a bulky and heavy appearance, is by far the moſt convenient and faſhionable coach-box in uſe: it is boot and coach-box together; and although it be apparently heavy, it is not more ſo than the common coach-box and boot, together, as the inſide is all a cavity, which is peculiarly convenient to carry parcels in, or to contain the coachman's requiſites, having a large, flat bottom,

Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.

tom, which, reſting on the framings or blocks, makes it more ſteady than other coach-boxes on the common principle. This ſort, however, is not ſo convenient to remove, and requires, when taken off, to have the vacant ſpace filled by another kind of budget, ſuch as is uſually put on to poſt-chaiſes.

SECT. 3.

IRON COACH-BOXES.

Fig. 3 and 6. The iron coach-boxes are of the moſt agreeable deſign, of a very light appearance, but are more heavy than the others. They are made to fix on the top ſides of a boot, or are ſupported on rich ornamented blocks: they can eaſily be taken off from the boot; but from the blocks it is never neceſſary, being only uſed to handſome town carriages. Their form differs agreeable to the fancy of the builder; but are moſtly of either of thoſe deſigns that are repreſented; the one ſhewing the footboard, and brackets or ledges on, and the other without them.

SECT. 4.

TRAVELLING COACH-BOXES.

Fig. 4. The difference of this coach-box lies in the ſeat only, is principally uſed for travelling carriages, but which may be made to any of the three laſt-deſcribed coach-boxes, though moſtly uſed to the one repreſented: it is made with iron frames at the ends, covered and lined with leather all round, with a cuſhion of the ſame, and has leather falls, which anſwer the purpoſe of a hammercloth: it is fixed on to the top iron-work with bolts, having a cradle, the ſame as the others, for the ſeat; they ſometimes hang upon ſprings, and are made with a head and knee-flap the ſame as to a one-horſe chaiſe; their uſe is to make the ſituation of the ſervant more comfortable, and more ſecure from danger, when travelling on bad roads: they can be made ſo as to take off occaſionally, and have the uſual ſeat and hammercloth put on.

SECT.

SECT. 5.

THE CHAISE COACH-BOX.

Fig. 5. This is made in imitation of a chaiſe body, and occaſionally placed on the boot; is of a ſize for one or two perſons to ſit in, frequently intended for the proprietor's own pleaſure to drive, or to give more freedom to view from the front windows. They ſhould always be lined with leather, and hung ſo as to be eaſy to ride in; a pair of ſprings ſhould be fixed to the front part, and hung or fixed to the boot; the hind parts ſhould be ſupported from thoſe ſprings which carry the body, by means of a bar which croſſes them, having the loop of the coach-box made to encircle this bar, and to hang thereon with a ſhort brace. This kind of a coach-box may be made to fix on a one-horſe chaiſe carriage, and ſerve both purpoſes; but if for this purpoſe only, it is uſually made much more ſimple than the one deſcribed.

SECT. 6.

THE COACH-BOX SEAT AND CRADLE.

COACH-BOXES are not complete without cradles and ſeats; but as, on ſome occaſions, they may be ſeparately wanted, the ſeparate ſtatements will therefore be neceſſary, and their value may be added to the coach-box.

A cradle is a leather platform, made to receive the ſeat: it is faſtened to the loops on the ſeat irons, and is either buckled or tied thereon, ſo as to let looſe or tighten at pleaſure. By thoſe cradles the ſeating for the coachman is made comfortable, and is generally adapted to their ſeveral conceits.

The ſeat is a long-formed cuſhion made of various ſizes, but moſtly two feet three or four inches, by three feet ten inches, or four feet long, made of ſtrong canvaſs and leather, ſtuffed with ſtraw, and covered over with cloth or baize, lined at the bottom ends with ſtrong pieces of leather, called galling-leathers, which reſt on the ſeat-iron, and preſerve it from wear by rubbing thereon. It is fixed on the cradles by ſtraps which paſs through it towards the ends, which ſtraps are faſtened to the fore ſtandards. Sometimes thoſe ſeats are faſtened to the ſeat-

irons with ſtraps and buckles; the ſeat-irons then extend to the width of the ſeat, which has two ſquare holes in each end for the ſtraps to go through: this method gives more length to the cradle, and makes the ſeat ſink in the middle by the coachman's weight, whereby it is more eaſy to ride on.

PRICE OF COACH-BOXES.

	£.	s.	d.
A common coach-box, as Fig. 1.	3	15	0
A Saliſbury ditto, as Fig. 2.	8	15	0
An iron ditto, as Fig. 3. and 6.	8	10	0
A framed boot for ditto,	5	5	0
Carved blocks for ditto, as Fig. 6.	8	8	0
A chaiſe-box without the boot, Fig. 5.	10	0	0
A coach-box budget, as Plate XII. Fig. 3, the ſprings excepted	10	0	0

SEATS AND CRADLES.

	£.	s.	d.
A common cuſhion ſeat	0	18	0
A cradle and ſtraps for ditto	0	12	0
A travelling coach-box ſeat fixed on the ſeat-irons, as Fig. 4.	3	13	6
A ditto with ſprings	7	7	0

SECT. 7.

TRIMMINGS.

THE trimmings about a carriage, with which the cloth is ornamented, have, within theſe few years, been much increaſed, both in quality and quantity. Therefore, to aſcertain the value of linings or hammercloths with any accuracy, it is neceſſary to repreſent the various ſorts of trimmings in uſe. That which is moſt generally uſed is made of worſted, with narrow ſilk ſtripes or lays, and is two inches and a half in width; from that it extends to three, three and a half, or four inches; but, for extraordinary purpoſes, ſuch as hammercloths, it will run to eight or nine inches.

The quality and breadth make a difference in the price. It is frequently made of cotton mixed with worſted; and ſometimes, for very ſuperb carriages, it is made of ſilk only. There are other ſorts of very narrow laces made, ſuch as are uſed to ſeam the cloth with, or to cover the nailings; the one is called ſeaming, the other a paſting lace; the colours of which are made to match thoſe in the broader patterns, but cannot form much of the figure, on account of the width. The pattern or figure of lace makes no difference

of

of expence, when the arms or creſt are worked in them, and then of courſe are extra, on account of the difference in workmanſhip. Fringes have alſo been greatly improved upon, and, like the laces, are to be valued according to their width and quality; as alſo if ornamented with button-hangers, which are moſtly put on them with a very good effect. The common width of fringe, including the gimp head, is five inches and a half. To form any ſtatement of the different prices of hammercloths and linings, it will be firſt needful to ſtate the ſeparate prices of the different ſorts of lace and fringe, and then the value of any hammercloth or lining may be collected from the quantity uſed on either occaſion.

PRICE OF LACES.

Inches Wide.		Worſted. per yard. s.	d.		Worſted & Cotton. per yard. s.	d.		Silk only. per yard. s.	d.
2	Figure	1	4	—	1	8	—	4	0
	Creſt	2	0	—	2	4	—	4	8
	Arms	2	8	—	3	0	—	5	4
2½	Figure	2	0	—	2	4	—	6	0
	Creſt	2	3	—	3	0	—	6	8
	Arms	3	4	—	3	8	—	7	4
3	Figure	2	8	—	3	0	—	8	0
	Creſt	3	4	—	3	8	—	8	8
	Arms	4	0	—	4	4	—	9	4
3½	Figure	3	4	—	3	8	—	10	0
	Creſt	4	0	—	4	4	—	10	8
	Arms	4	8	—	5	0	—	11	4
4	Figure	4	0	—	4	4	—	12	0
	Creſt	4	8	—	5	8	—	12	8
	Arms	5	4	—	5	8	—	13	4

Beſides thoſe broad and binding laces, there are ſome very narrow, that are invariable in their ſize, called ſeaming and paſting-lace; and alſo ſmall trimming, called roſes and French ſtrings. The ſeaming is what the cloth is ſeamed with; the paſting is what covers the nailings of the cloth; the roſes are what go round the holes of the cloth where

where the hand-holders are placed; and the French ſtrings are what the glaſs-ſtrings are held by.

	Worſted.		Cotton.		Silk.	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*
Seaming lace, per yard	0	6	0	6½	1	8
Paſting ditto, ditto	0	5½	0	6	1	6
Roſes, per doz.	3	6	4	0	16	0
French ſtrings, per pair	2	0	2	6	6	0

If, on any occaſion, a ſmall quantity of broad lace is required of any particular pattern, and a loom is neceſſary to be ſet for it, an expence is incurred from 10s to 20s. according to the pattern or width, beſides the price of the lace. The leaſt quantity a loom can be ſet for, without a charge, is 20 or 24 yards of broad lace.

SECT. 8.

FRINGES.

SILK fringes are ſo ſeldom uſed, that any obſervation on them is unneceſſary. Thoſe of any ſignification are what are uſed to hammercloths, and are of two ſorts, the plain and ornamented, (ſee Plate xv. letter *b*) and are uſually of the

following width and prices. The value of the ornaments called button-hangers, which are afterwards put on the fringe, is proportioned by the number of buttons on each hanger, which is regulated by the depth of the fringe.

PRICE OF FRINGES.

	Plain Worſted Fringe. Per Yard.	Worſted and Cotton Fringe. Per Yard.	Number of buttons to each hanger.
	s. *d.*	*s.* *d.*	
5 inches deep	2 8	3 4	3
6 ditto	3 4	4 0	4
7 ditto	4 0	4 8	5
8 ditto	4 8	5 4	6
9 ditto	5 4	6 0	7

The ornaments or hangers, to either fringe, exactly double the price, allowing ſix hangers to a yard.

SECT. 9.

HOLDERS AND STRINGS.

BY holders and ſtrings are meant the lace, which is made up with taſſels, and lined with cloth or leather, for the purpoſe of holding by, or drawing

ing up the glaſſes with; they are uſually made of a greater width than the other lace, with which the lining is trimmed.

In a complete trimming, there are three deſcriptions of holders or ſtrings, viz. the hand-holders, the ſwing-holders, and the glaſs-holders, or glaſs-ſtrings, (ſee Plate xv. letters *a*, *b*, *c*) each of which is the ſame in value; theſe are called inſide holders. There are, beſides, outſide footman-holders, which buckle on the back part of the body for the ſervant to hold by, ſometimes uſed in ſets (or four) and ſometimes in pairs only: Theſe holders are not always made of lace, but frequently of a ſtrong wove worſted, called a webbing, in which only the colours, and not the figure, can be worked; theſe are the cheapeſt and moſt durable, but the lace-holders accord beſt with the other trimmings.

To ſtate the price of holders, a reference muſt be had to the value of the different ſorts of lace, adding to the quantity of lace uſed for each holder the price of the trimmings uſed to complete them, ſuch as the taſſels, the plated buckles, and the leather billets, with which they are made, to hang on the ſtaples behind.

Every inſide-holder takes a yard of lace, and every footman-holder a yard and a half.

The expence of making up the holders, with lining, taſſels and buckles, is equal to the price

of the plain lace; ſo that doubling the value of the lace, gives the price of the holders: but where the creſt or arms is worked in the lace, the value of the taſſels, &c. is only to be added to the amount of the figured or plain pattern lace—for example, one yard and a half of lace for a footman-holder, two inches and a half wide, at 2s. per yard, is 3s. worth of lace; the taſſel and the billet and buckle to complete it, is alſo 3s. which makes 6s. for a holder of this deſcription. The ſame breadth and quantity of lace, with the arms worked thereon, is worth 5s. and the trimmings, &c. only 3s. which makes for this pattern-holder 8s.; ſo that a pair of worſted lace footman-holders, two inches and a half wide, common figure, is 12s.; if with arms worked in the lace, 16s.

PRICE

PRICE OF HOLDERS.

Inches Wide.		Inſide hand-holders, and glaſs-ſtrings.		Footman holders. Of lace.		Of web.	
		s.	d.	s.	d.	s.	d.
2	Worſted	2	8	4	0	3	0
	Cotton	3	4	5	0	4	0
2½	Worſted	4	0	6	0	4	0
	Cotton	4	8	7	0	5	0
3	Worſted	5	4	8	0	5	0
	Cotton	6	0	9	0	6	0
3½	Worſted	6	8	10	0	6	0
	Cotton	7	4	11	0	7	0
4	Worſted	8	0	12	0	7	0
	Cotton	8	8	12	0	8	0

Web-holders are uſually made with worſted only, becauſe the cotton ſo ſoon ſoils.

From theſe ſtatements of trimmings, the value of every deſcription of hammercloths or linings is to be obtained by firſt knowing the quantity neceſſary to be uſed, which is hereafter mentioned.

CHAP.

CHAP. IX.

PLATE XV.

THE LININGS AND INSIDE FURNITURE OF BODIES.

THE lining the inſide of a body requires ſome attention to give it thoſe advantages neceſſary for a gentleman's carriage. A richneſs in its ornaments is the moſt material thing; and the difference of expence, which is principally in the lace, is ſo trifling when compared to its ornamental advantages, that it would never have been conſidered an object, had it been fully known. The colours of the cloth make no difference in the value, except ſcarlet or crimſon, which make an addition of exactly one-third in the price of the cloth.

Thoſe generally uſed for cloſe carriages are light-coloured cloths; thoſe for open carriages are of dark, or mixtures. The cloths ſhould always be of the very beſt ſecond, if not ſuperfine; but ſecond is what is moſtly uſed. The quilting of

Plate XV.

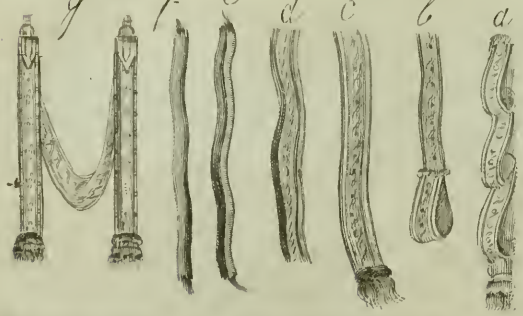
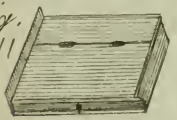


Fig. 11



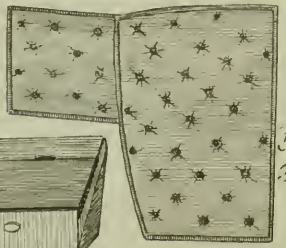
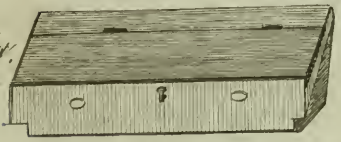


Fig. 3

Fig. 10



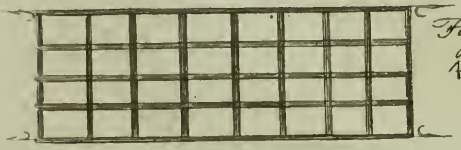


Fig. 4

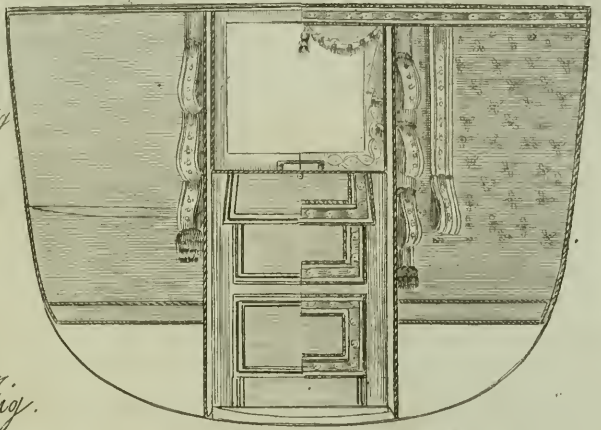
Fig. 5

Fig. 6

Fig. 8

Fig. 9

Fig. 1.



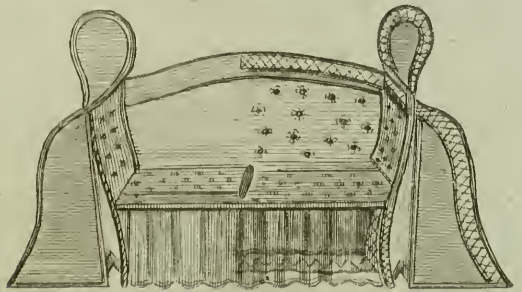


Fig 2.

of the cloth with ſmall ornaments, called tufts, alſo gives a richneſs to the lining; thoſe ſhould match the colours uſed in the trimmings; and the trimmings ſhould be of ſuch colours as are uſed in the liveries, but of any fancy pattern. The creſt or arms lace has a noble appearance; but if the width of it exceed three inches and a half, it looks heavy. A fullneſs of cloth to the ſeat-falls ſhould always be allowed, and a lace of two inches and a half breadth for the holders uſed on the plaineſt occaſions; that for binding the falls, pockets, &c. two inches; but as the value of different trimmings can only be known by a ſeparate deſcription of the ornaments uſed, a reference to them will be found very neceſſary.

SECT. 1.

Letters *a*, *b*, *c*, *d*, *e*, *f*, *g*, *h*, (Plate xv.) repreſent the various trimmings with which the linings and hammercloths are ornamented, and, on account of the variety, are each deſcribed by ſmall letters.

a. The hand-holders, are the loops for the hands to hold by, made of a yard and a quarter of lace, cut in ſhort lengths, and nailed on the ſtanding pillars, through part of the lining and oval

oval trimmings, called roſes; a flat taſſel ornaments the bottom piece.

b. The ſwing-holder, a long loop for the arm to reſt in, made of a yard and a half of lace, with an ornamented button to loop in different holes, uſed inſtead of having elbows to project within the body.

c. The glaſs ſtring, or holder, is what the glaſs is drawn up by, made of a yard of lace, ornamented with a flat taſſel at the one end, and nailed on the glaſs frame at the other; having button-holes worked, by which the glaſs is hung to any agreeable height. All thoſe holders are lined with a thin leather, or cloth, the ſame as the lining; the glaſs-holder has a narrow lace, called a French ſtring, faſtened to it, which, when the glaſs is up, keeps it from the bottom.

d. The binding lace; the lace of different widths, with a tape edge, which the falls, the pockets, and the ſtep linings are trimmed or bound on the edges with; the valent round the roof edge is made of this lace.

e. The paſting-lace, is a narrow lace of about an inch wide, with a taped edge. Its uſe is to nail the taped part over the other nailings of the cloth, and turning the lace ſide over, which is paſted down, covers all the nailings.

f. The ſeaming-lace, is a narrow lace of about half an inch broad, having a tape edge on each

each ſide. This lace is ſewed round a ſmall cord, and then ſewed in the corner ſeams of the cloth, and alſo nailed round the edges of the doors or windows.

g. The footman-holders; thoſe are conveniencies for the ſervants to hold by, which, if made of lace, are of two pieces, 3-4ths of a yard long, ſewed together for ſtrength; but if made of web, are double and left open, being ſtronger: they are each ornamented with round or flat taſſels, according to the width. The double holders are four in number, the ſingle two; but the ſingle pair has moſtly a piece hanging acroſs between the two; they are made up with leather billets and buckles, and are buckled on to ſtaples fixed on the back.

h. The fringes, which are ſeldom uſed but to hammercloths; one half is repreſented plain, and the other ornamented with button-hangers.

Fig. 1. The inſide view of a coach body repreſented two ways trimmed; the one half ſhews the plain method of trimming, the other the full ornamented.

The plain ſide has the pockets, the falls, and valents, trimmed with a narrow two-inch lace, and the holders with a two and a half. There are many linings uſed plainer than this; but agreeable to the preſent faſhion, this is as plain as a lining

lining ought to be, and ſhould be an eſtabliſhed rule to go by.

The ornamented ſide has the pockets, falls, and valents trimmed with a broad three inch lace, of the ſame width with the holders, having alſo an extra ſide or ſwing-holder for the arm to reſt in. The ſides are quilted with ſmall ornaments, made either of cloth or worſted. It ſhews a feſtoon curtain, and the glaſs frame covered with lace inſtead of cloth.

Fig. 2. The inſide view of a chaiſe lining, repreſented with real doors, to ſhew the ſides and back trimmings thereof. The plain ſide of this body has the wings and falls bound only with a narrow inch and a half trimming; but there are many chaiſe linings that have no lace round thoſe parts, further than that which the cloth is ſeamed with; but that is a very plain and ancient method of finiſhing.

The cuſhion to the plain trimming is repreſented only in one length, with a cuſhion for the driver to ſit on. The ornamented ſide ſhews the back wings and ſides trimmed with a broad two inch and a half lace; the back and ſides quilted the ſame as the coach; the falls are bound with a narrow, and trimmed above with a broad lace, which is the method frequently uſed of trimming the falls of other linings.

The

The cuſhion for this is divided, the one half on the ſeat, the other is placed on a box for the driver to ſit on; which cuſhion muſt alſo have a fall, trimmed the ſame as the other, to cover the box.

SECT. 2.

Fig. 3. A ſquab, or ſleeping cuſhion; a thin cuſhion faced either with leather or ſilk, ſtuffed with ſoft wool, and quilted; they are occaſionally added to the inſides of cloſe carriages, for the head or ſhoulders to incline againſt; they are ſometimes made faced on both ſides with leather and ſilk, to be uſed alternately. Thoſe for the back part are generally made of a ſmaller ſize, extending only half the depth of the ſide one; they are uſually bound with a narrow lace or ſilk ribbon, and fitted on with buttons or ſtrings.

SECT. 3.

Fig. 4. A net; a convenience ſometimes placed acroſs the roof between the doors, for the purpoſe of containing light parcels free from injury.

They are made either with narrow thin lace, like a tape, or with worſted line; and may be fixed, or occaſionally hung on hooks, as deſcribed.

SECT. 4.

Fig. 5. The ſpring curtain; a ſilk curtain fixed to a long barrel, containing a ſpring, which admits the curtain to be drawn down to an agreeable depth, and, by means of a trigger, is inſtantly drawn up to its place. A ſtick is ſewed in the ſilk at the bottom, with loops at the ends, for the line to paſs through; which line ſteadies the ſudden motion of the curtain. Theſe things are ſo convenient, that they are indiſpenſably neceſſary to almoſt every kind of cloſe carriage. The Venetian blinds are ſubſtitutes for them in a great meaſure, but that only when the glaſſes are not wanted to be put up.

SECT. 5.

Fig. 6. The feſtoon curtain; a ſilk curtain trimmed with ſilk fringe; moſtly intended for ornament only, being found inconvenient for uſe; they are fixed over the lights or windows of the doors

doors as repreſented, and are ſometimes made to hang in a drapery form on the ſides, but moſtly are uſed to the top only. They ornament very much the inſide of a carriage, but are of no utility otherways.

SECT. 6.

Fig. 7. The glaſs and glaſs frame: the glaſs frame is made of thin oak; the one ſide is repreſented covered with lace, the other with cloth, in the uſual way. The glaſs ſhould always be of the beſt plate; but a great difficulty lies in procuring them, particularly of Engliſh manufacture: the French are the beſt in uſe. The preferable glaſſes are thoſe which are free from bladders or veins; but, to clear them from thoſe faults, they are frequently reduced to little more than the ſubſtance of crown or common window-glaſs. It is almoſt impoſſible to ſelect them free from bladders; but veins ſhould never be admitted to paſs. Their value is only to be rated by their ſize, excepting if diamond cut, or bevelled round the edges, which is now out of faſhion.

SECT. 7.

Fig. 8. The Venetian blind; a blind frequently uſed as a ſubſtitute for the common ſhutter and ſpring curtain, anſwering either purpoſe, with the preferable advantage, in hot weather, of admitting the air and excluding the ſun, and, when cloſed, ſerves the purpoſe of the ſhutter, to prevent duſt from ſoiling the carriage while ſtanding by. It acts by means of a ſpring bolt, with which it is opened to any extent at pleaſure. It is moſtly painted a verdigriſe green, but ſometimes, to handſome carriages, is painted of variegated colours, and varniſhed as the pannels are.

SECT. 8.

Fig. 9. The common ſhutter, a ſhutter which is made of mahogany, in a neat manner, with ſmall pannels, and a ſmall glaſs window in the upper middle one: the neateſt has a ſmall moulding on the edge of the framings: they all have a lace tape in the middle, and a loop at the top to pull them up by.

SECT.

SECT. 9.

Fig. 10. The ſeat-box, a box made to ſlide under the ſeat, which fills that vacant place. It is portable, and convenient to carry linen, &c. and is moſtly made of thin oak or mahogany.

SECT. 10.

Fig. 11. The driving-box; a box made for the driver to ſit on, fitted to the half top of the ſeat of a chaiſe, &c. for the cuſhion to be placed on. It is made as the other is, and convenient for the ſame purpoſes.

SECT. 11.

FALSE linings, are linen linings uſed to cover and preſerve the others if good, or to hide them if bad: they are made of the linen uſually called yard-wide, and at about 2s. 3d. per yard in value. The roofs are ſeldom covered, and as much of the trimmings as poſſible ſhould be ſhewn.

To bind the edges of the linen lining with a border in imitation of lace, is an additional ornament to it, and is now frequently done.

All thoſe articles may be conſidered as appendages to the inſide of carriages; and their value being ſeparately ſtated, will enable any perſon to regulate the different modes of furniſhing any deſcription thereof.

QUANTITY OF MATERIALS USED FOR LININGS.

THE variety of bodies, and the different methods of trimming them with lace, and furniſhing them with other conveniencies, require them to be ſeparately ſtated; and that the different prices may be more eaſily collected, the quantities of cloth and lace uſed for each kind of plain trimming ſhould alſo be given, previous to the prices being ſtated, ſo that from one ſtatement the value of all the others may be known, by adding ſuch things as may be wanted out of the common way.

		YARDS.			
		Laces.		Cloth.	
		Narrow ſeaming.	Broad binding.	Broad-cloths.	Linen.
As Fig. 2 and 3.	A coach or landau	78	22	10½	18
	A chariot or demi-landau	54	18	8	14
	A phaeton or chaiſe	18	6	2½	5
Wings to chaiſe or phaeton —		—	4	½	1
Head to ditto — —		5	—	3	6

PRICE

PRICE OF LININGS.

THE following are the prices of the various linings complete, after having been ſtuffed up and prepared, as before mentioned in the firſt ſtatement of bodies, ſo that the price of new lining an old carriage is the ſame as that ſtated for a new one.

	Coach.			Chariot.			Chaiſe or Phaeton. * With head.			With wings.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
The body lined with ſecond cloth, and trimmed with a two-inch worſted lace, and two inches and a half for holders	15	10	0	12	0	0	7	15	0	5	10	0
EXTRAS to be added to the above deſcription.												
The body, if made to open landau faſhion	1	11	6	1	1	0	—	—		—	—	
The cloth, if ſuperfine, inſtead of ſecond	4	0	0	3	0	0	2	0	0	1	0	0
If Morocco leather, inſtead of cloth	8	0	0	6	0	0	4	0	0	2	0	0
The ſide of the lining quilted	1	1	0	0	10	6	0	10	6	0	10	6
Swing-holders, and the other laces, 2½ inch broad	1	11	6	0	18	0	0	2	6	0	3	6
Ditto —— ditto 3 ditto	2	7	0	1	2	0	0	5	0	0	7	0
Ditto —— ditto 3¼ ditto	3	3	0	1	18	0	0	7	6	0	10	6
Ditto —— ditto 4 ditto	3	18	0	2	3	0	0	10	0	0	14	0
A falſe lining to cover the other, except the roof	3	10	0	2	15	0	2	2	0	1	4	0
Ditto, with the roof covered	4	0	0	3	3	0	—	—		—	—	
Ditto, with 2½ inch bordering to imitate lace trimmings	5	5	0	4	10	0	2	10	0	1	8	0

* Theſe prices only include the lining, without the wood or leather work of the head.

	Coach. £.	s.	d	Chariot. £.	s.	d.
A ſet of ſilk ſquabs, with half backs, faced on one ſide with ſilk only ——	4	0	0	2	12	6
Ditto with Morocco leather ——	4	15	0	3	3	0
Ditto faced with ſilk and leather ——	5	15	6	3	13	6
A net for the roof, either flat or round ſtring —— ——	0	10	6	0	10	6
A ſet of ſilk ſpring curtains ——	3	3	0	3	0	0
A ſet of feſtoon curtains, tops only —	2	12	6	2	12	6
A ſet of ditto with ſide drapery ——	3	13	6	3	13	6
A ſet of glaſſes and glaſs frames, covered with cloth, the ſize of the glaſs uſually about 20 inches ſquare ——	6	10	0	6	15	0
Ditto covered with lace two inches wide	7	7	0	7	10	0
A ſet of Venetian blinds ——	4	10	0	4	10	0
A ſet of mahogany ſhutters ——	1	15	0	1	15	0

	Phaeton or Chaiſe. £.	s.	d	Coach. £.	s.	d	Chariot. £.	s.	d.
A carpet or oil-cloth for the bottom — ——	0	7	6	0	10	6	0	10	6
Trunks to ſlide under the ſeat	0	15	0	1	10	0	0	15	0

CHAP.

CHAP. X.

HAMMERCLOTHS.

HAMMERCLOTHS are among the principal ornaments to a carriage; they are a cloth covering to the coachman's ſeat, made to various patterns agreeable to the occupier's fancy. The fullneſs of the plaiting of the cloth, its depth, and the quantity of trimmings thereon, proportion the expence to almoſt any amount; but thoſe of the general ſort are made of a livery or ſecond cloth, of ſix breadths, which meaſures nine yards round, and about twenty-eight inches deep, lined with a ſtrong coarſe linen; the ſize of the ſeat in a great meaſure regulates the number of breadths of cloth to be uſed; as the ſame fullneſs would appear with five breadths on a ſeat of three yards round, as ſix breadths on a ſeat of four yards, which is the general ſize now in uſe; and no hammercloth ought to be made with leſs. The top rows of fringe and lace are put on after the hammercloth is made up, and takes no more in quantity than what the ſeat meaſures; the others extend round the fullneſs of the cloth.

SECT. 1.

OIL-SKIN HAMMERCLOTHS.

OIL-ſkin hammercloths are uſed for the preſervation of the others in wet weather; there are three ſorts of them, viz. the common oiled linen, the painted linen, and the painted prepared woollen or patent cloth.

The plain oil-ſkin, though called a ſkin, is only a thin linen prepared or dreſſed with oil, and of a very ſlender texture, owing to the effect the oil has upon it, which it ſoon rots.

The painted linen is an imitation only of the patent woollen, prepared with colours to reſemble them; but are little ſuperior to the common ſort, yet are often impoſed in their ſtead, though of not one half their value in expence or ſervice.

The patent woollen is prepared in ſome ſecret way on a thin woollen cloth, that, for durability, exceed the ſervice of two of the others, but is alſo conſiderably greater in expence: they are painted of various patterns, to ſuit moſt colours that the carriage is painted of. The tops of theſe are always made with a ridge on each ſide of the coachman's ſitting place, which makes a channel to convey the wet from running under him,

Fig. 1.

Fig. 4.

Fig. 2.

Fig. 3.

Wilson, Lith.

him, and have alſo thin boards placed up the four corners, to preſerve their ſhape.

SECT. 2.

PLATE XVI.

Fig. 1. A plain hammercloth, bound at top and bottom, with a narrow binding lace two inches wide; this repreſents alſo a plain oiled linen cover of the common ſort.

Fig. 2. Repreſents the patent woollen and the painted linen covers, which ſo nearly reſemble each other, that the difference can only be diſcovered on a near examination; the ſquare place on the top is the fitting place for the coachman, which is made of woollen cloth

Fig. 3. A plain-trimmed hammercloth; the cloth of two colours, trimmed with three rows of lace two inches and a half wide: this is the kind of hammercloth generally uſed as a cover, made of four breadths, and only plaited at the corners; but, if full plaited, the quantity is as uſual.

Fig. 4. A fuller trimmed hammercloth, having three rows of lace two inches and a half wide, and two of ornamented fringe five inches deep.

PLATE

PLATE XVII.

Fig. 5. A full-trimmed hammercloth, with lace three inches wide, having four rows of lace, and three of ornamented fringe, ſo as almoſt wholly to cover the cloth with the trimmings.

Fig. 6. The preſent faſhion of hammercloths, the trimmings of which are broad, and placed on the bottom only; the lace in the middle is four, and the fringe nine inches deep; a plainer lace is at the top and bottom, two and a half inches broad for the binding; the cloth is of two colours to match the livery; the creſts and mantlings are embroidered on the ends.

Fig. 7. A handſome hammercloth, trimmed with a row of two and a half inch lace at the top and bottom, and a broad four inch lace in the middle; two rows of nine-inch fringe, and ſilk drapery on each fringe.

Fig. 8. A hammercloth bound, top and bottom with a lace two and a half inches broad: a row of velvet is placed above the fringe, bound with a narrow lace; alſo a row of velvet Vandyked at the top, bound the ſame way, and a deep nine-inch fringe at the bottom, with ſilk ornaments; the arms, creſt, and ornament foliage mantles are worked in embroidery on the ends.

Fig.

Plate XVII

Fig. 5.

Fig. 7

Fig. 9.

Fig. 6.

Fig. 8

Fig. 9. Repreſents the embroidery now uſually worn upon hammercloths, which is done in various fanciful devices, the principal of which are the arms, creſts, and cyphers, worked on the ground plain, or in mantles of the curtain or foliage patterns. They are moſtly worked in worſted and ſilk, and the ſeparate prices are ſtated with thoſe of hammercloths.

PRICE OF HAMMERCLOTHS.

TO obtain correct information of the value of any ſort of hammercloths, it is neceſſary to know the quantity of cloth and trimmings they are made up with, which depends on the ſize of the ſeat: it meaſuring in common four yards round, requires nine yards to plait round it, with a proper fullneſs, which is ſix breadths of 6-quarter broad-cloth, cut in lengths of 7-8ths or 3-4ths of a yard, and ſewed together; ſo that a ſix-breadth hammer-cloth, which is the uſual ſize, takes nine yards of each trimming to go round the cloth, and four yards for the top; ſo that to add or reduce a breadth, is to allow one-ſixth from the following ſtatements, or one yard and a half of each trimming, and 7-8ths of a yard of cloth, for every breadth added or omitted.

The

The patterns of hammercloths described in Plates XVI. and XVII. being what are generally used, the separate prices are here stated, according as they are described, to convey a ready information of collecting the amount of any other, by referring to the former statements.

	Livery. £. s. d.	Second. £. s. d.	Superfine. £. s. d.
A hammercloth made up of six breadths, containing 5½ yards of broad-cloth, without trimmings — —	4 10 0	5 10 0	6 10 0
Ditto, with the following trimmings, of livery cloth:			
13 yds. of 2-inch lace ——	as Fig. 1.		5 5 0
22 yds. of 2½ inch lace ——	Fig. 3.		6 6 0
22 yds. of 2¼ inch lace, and 9 yds. of 5-inch ornamented fringe ——	Fig. 4.		9 9 0
31 yds. of 3-inch lace, and 22 yds. of 6-inch ornamented fringe ——	Fig. 5.		17 0 0
13 yds. of 2½ inch lace, 9 yds. of 4-inch lace, and 9 yds. of 9-inch ornamented fringe, worsted crest and mantling on the ends	Fig. 6.		14 0 0
13 yds. of 2½ inch lace, 9 yds. of 4-inch lace, and 13 yds. of 7-inch fringe, two rows of silk drapery — ——	Fig. 7.		18 12 0
13 yds. of 2¼ inch lace, 9 yds. of 8-inch plain fringe, 13 yds. of 4-inch velvet at 4s. and 36 yds of 1-inch binding at 1s. silk crest and mantling on the ends —	Fig. 8.		14 7 0
EMBROIDERY.			Worsted and Silk.
Crest or cyphers only ——	——		1 5 0
Crests and mantles only ——	——		2 0 0
Arms and crests ——	——		2 10 0
Arms, crests, and mantles ——	——		3 3 0

For other cloths add the difference of price as above.

CHAP

CHAP. XI.

PLATED, BRASS, AND COMPOSITION METAL FURNITURE FOR BODIES, &c.

SECT. 1.

THE neceſſary conveniencies and ornaments for the bodies being of various deſcriptions, and as variouſly finiſhed, it is neceſſary to introduce them ſeparately, that the variety may be the better underſtood: ſome of them form a part of the original bodies, which being articles neceſſary to build with, their value is included in the former ſtatement of Bodies, and are only here introduced for a general deſcription of their form: ſome of the other articles have alſo been formerly repreſented in the ſubject of iron-work; but being what are frequently plated, they are here deſcribed under that head, and the increaſed amount, for plating only, is added: there are ſome which are only occaſionally uſed, and others that are different in their form from each other,

other, which makes it neceſſary to treat of them ſeparate from the bodies, that their different values may be known, and their advantages the better underſtood, as repreſented in Plate XVIII.

DOOR PLATES.

Fig. 1. The door-plates, which are made of braſs, are fixed round the edges of the door with ſcrews, having, in the ſolid braſs, a bead or moulding which forms two rabbets; the one laps on, and confines, the door-pannel, the other covers the joint when the door is ſhut.

DOOR HINGES.

Fig. 2, Are ſtrong hinges of a peculiar form, made either of braſs or iron, having a ridge on the outſide, to ſtop the door from turning too far back in the opening.

DOOR LOCKS AND HANDLES.

Fig. 3. A door box-lock, which is a flat ſquare box brazed on a flat iron plate, having within the box a broad flat tongue or bolt, which is turned by a ſquare ſpindle fixed through it, on the end of which ſpindle the handle *A* is hung, by which the bolt is turned: the form of the handle ſhould be made agreeable to the pattern of the buckles uſed for the braces, whether round, ſquare, oval, or octagon. Thoſe box-locks are morticed in the door pillars, and fixed by the plate to which they are brazed: a flat plate, with a ſquare hole, is ſunk in the oppoſite pillar over the mortice which receives the tongue. The handles are moſtly plated, and the price is included in the former ſtatements of bodies.

PRIVATE LOCKS.

Fig. 4. Are box-locks, made in the ſame form and fixed in the ſtanding pillars the ſame way as the others are in the door-pillars; they are ſometimes made with wards, and a bolt, the ſame as common locks, and are turned with a common

key, but are moſt frequently made as the door-locks, to turn with a pipe-key; the key-hole is covered with a double ſcutcheon.

DOVE-TAILED KETCHES.

Fig. 5. Are two ſmall iron machines, which fit cloſely in a dove-tailed joint within each other, and are ſeparately fixed on the ſhutting door and ſtanding pillar; their uſe is to prevent the door from dropping or ſinking by its weight.

GLASS ROLLERS.

Fig. 6 and 7. Theſe belong to the inſide work of a body, for the aſſiſtance of drawing up the glaſſes with; they are made of ſeveral patterns, from three to four inches long, of braſs, and are only plated with a thin leaf of ſilver; as they do not require to be cleaned like the outſide plating, they anſwer the purpoſe ſufficiently well; the ſunk rollers are at preſent moſt in uſe, and are the beſt, being more out of the way.

BUTTONS OR STUDS.

Fig. 8. Theſe are nails with large braſs heads; if uſed to the inſide of bodies, are then ſilvered; but if uſed for outſide purpoſes, ſuch as for knee-boots, they ſhould be plated, but are ſeldom ſo done.

MOST of thoſe articles are what is neceſſary for building the body with, and are included in the value of bodies in the former ſtatements: what are only occaſionally uſed, and ſhould be charged extra for, will here be ſtated.

PRICE OF OCCASIONAL REQUISITES.

	£.	s.	d.
A pair of private locks and bolts to the ſhutters, complete, for coach or chariot	1	1	0
A ſet of ſilvered glaſs rollers, four inches long	0	10	6
A ſingle ſilvered knee-boot button	0	0	4
Ditto, if plated	0	8	0

SECT. 2.

PLATING.

PLATING is a ſuperficial covering to the buckles and other furniture of a carriage, either with ſilver or metal of any other malleable quality. Nothing has ever been introduced with a better effect than this mode of ornament; in particular, the ſilver plating, which is now become ſo general, that almoſt every hackney carriage exhibits ſome portion of it.

There is no one article in the carriage can be of a more deceitful quality, as it can be manufactured at almoſt any price, even cheaper than the original braſs ornaments, and yet look well; in particular the flat plates and beaded mouldings, being manufactured with different proportions of ſilver ſoldered on to a certain quantity of metal, which, after being thus plated, is rolled or flatted in mills to any degree of thinneſs, leaving ſometimes but barely the colour of the ſilver, which is frequently not thicker than a common leaf of beaten ſilver. Other ſilver plated articles, which are wrought by hand, ſuch as buckles, handles, terrets, &c. are plated in a different way, and cannot be done but with ſome degree of thickneſs; the thinneſt of which will wear

ſome conſiderable time longer than the common rolled ſilver plating. The difference of light and ſtrong plating is an object worth attending to, as there is more than double the odds of price between the two extremes, particularly in the beads or flat ornaments. A dependence muſt here be placed on the manufacturer for the quality, as the appearance is ſo exact, that, unleſs analyſed, no other perſon can tell the proportion they bear. The patterns of the furniture are numerous; thoſe are the beſt calculated for wear that have no raiſed or ſharp edges; the round-moulded furniture has the faireſt chance, and is, for the moſt part, the cheapeſt; all ornaments that are raiſed, ſuch as ſcrolls, creſts, &c. ſhould be of ſilver, as the cleaning ſoon ſpoils them, if only plated.

It is next to impoſſible to enumerate every article that is ſometimes plated; what is moſt generally uſed will only be deſcribed: there are a number of plated articles uſed to harneſs, which will not here be noticed, but will be in the ſecond volume, under the deſcription of harneſs; all that will be here deſcribed is the furniture for the carriage, which principally lies in the mouldings, head-plates, joints, &c.

SECT. 3.

BRASS AND COLOURED METAL FURNITURE.

THE furniture and ornaments to a carriage were originally made of braſs; and, now that ſilver plating has become ſo common, braſs is again become more faſhionable, but improved from the original manner of making it: the common braſs furniture is uſually made out of the ſolid metal, ſuch as the mouldings, head-plates, buckles, and rings; but the other furniture where the ſtrength of iron is neceſſary, ſuch as the joints, is plated with braſs, in the ſame manner as when plated with ſilver. There is alſo a metal uſed, which is a compoſition of braſs and copper, which looks well, and is more malleable than braſs for plating with; the principal objection to thoſe metals is, that they ſoon tarniſh and canker, and are much more difficult to clean than ſilver plating.

The price for ſilver plating being ſo much reduced, makes the difference between it and braſs furniture not ſo great as many people imagine. To take it in general, the common braſs furniture is about one half, and the compoſition is about two-thirds of the price of the beſt plated ſilver.

SECT. 4.

THE MOULDINGS OR BEADS.

MOULDINGS are of various patterns and ſizes, and of as many different qualities; but to reduce the variety to a few rules, will furniſh ſufficient information. The inſide cavities are filled with a ſolder which holds the ſhanks for the mouldings to be faſtened on with. The quality of the ſilver plating ſhould be ſuch, that in the conſtant uſe of a carriage, with proper cleaning, it ſhall remain perfect four years, and ſeven without wearing through, except at the edges. The middling ſort ſhould wear two years perfect, and three without wearing through, except at the edges. On the inferior ſort there can be no dependence whatever. Braſs and compoſition metal mouldings, not being plated, but made of the ſolid metal, can never be injured by wear. The width of the mouldings proportions the value; it is meaſured acroſs the bottom, and ſold by the foot, including the putting on. The patterns make no material difference in the expence, as they are all drawn through a mould to any form; the difference in the trouble is only in the ſetting and burniſhing; therefore, to proportion the

prices to a certain width and quality, will anſwer every purpoſe of information.

Fig. 8. Is the ſmall quill bead, moſtly put on in double rows, which has a very neat appearance.

Fig. 9. Is the general ſort of moulding in uſe, which looks bold, and wears well.

Fig. 10. Is a neat pattern moulding, made hollow in the middle, and rounding on the ſides, and, having no ſharp edges, wears well.

Fig. 11. The common flat moulding, much uſed: the edges of this moulding are ſoon rubbed through by cleaning.

Fig. 12. A fancy moulding, ſeldom uſed but to handſome carriages, and is moſtly made of a double angle to clip the corner: the many edges to this moulding require to be ſtrongly plated, to wear well.

Fig. 13. A very common pattern moulding, which looks rich, but, on account of the raiſed edges, does not wear well.

Fig. 14. A ſcroll and tip ornament, made to give a finiſhed appearance to where the bead terminates at the ends of the bottom, ſides, &c. Theſe ornaments ſhould always be made of thin ſilver.

PRICE OF MOULDINGS.

FIG. 8, 9, 10, 11, 12, 13.

Size.	Silver Plated. Best.	Middling.	Inferior.	Compoſition Metal.	Braſs.
Inch.	s. d.	s. d.	s. d.	s. d.	s. d.
2-8ths	1 3	1 0	0 9	0 10	0 8
3-8ths	1 9	1 6	1 0	1 2	0 10½
4-8ths	2 3	1 9	1 3	1 6	1 1½
5-8ths	2 9	2 3	1 6	1 10	1 4½
6-8ths	3 3	2 9	1 9	2 2	1 9½

SCROLL AND TIP ORNAMENTS.

FIG. 14.

	Silver.	Beſt plated Metal.	Compoſition Metal.	Braſs.
	s. d.	s. d.	s. d.	s. d.
A pair of ſcroll ornaments — —	8 0	6 4	4 0	3 0
A pair of tip ornaments	6 0	4 0	2 8	2 0

SECT. 5.

FRAMES.

FOR many part of the bodies the mouldings are obliged to be made into frames, by firſt ſetting them to the form intended, and then ſoldering

ing the joints previous to putting them on, for which an extraordinary charge for each joint, and for each ſet, is to be allowed, in addition to the quantity of moulding uſed; and an inch over the exact meaſure for jointing; but, unleſs ſoldered at the joints, ought only to be charged with the other mouldings, allowing for each ſet only.

Fig. 15. A plated wing-frame, is a broad caſed moulding, with which the wing-frame is covered: beſides allowing for the width and meaſure, five ſhillings each for putting them on ſhould be added; the pattern in general runs large, and is about 3 feet 6 inches in length each frame.

Fig. 16. An octagon frame, formed to the back light or window, put on previous to the glaſs being fixed.

Fig. 17. A whole ſword-caſe frame; a moulding bent in the form of the ſword-caſe end, and fixed thereon.

Fig. 18. A half ſword-caſe frame; a moulding formed to the outer ſhape only of the ſword-caſe end.

Fig. 19. A ſham or real door-frame; a moulding ſhaped to the pattern of the contracted part of the ſide of a chaiſe or phaeton body, called a door.

PRICE

PRICE OF FRAMES.

	Silver Plated.									Composition Metal.			Braſs.		
	Beſt.			Middling			Inferior.								
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
An octagon or back-light frame —	0	10	0	0	9	0	0	8	0	0	7	8	0	5	0
A pair of ſword-caſe frames	0	11	0	0	10	0	0	9	0	0	8	4	0	5	6
A pair of half ditto —	0	11	0	0	1	0	0	1	0	0	5	4	0	4	0
A pair of wing frames —	1	15	0	1	10	0	1	1	0	1	4	0	0	18	0

SECT. 6.

HEAD PLATES.

THESE are ornaments made to fix on the upper quarters of a coach or chariot, and on the flats of a chaiſe head; they are of various patterns, and of different qualities of metal; but ſhould be in proportion to the beadings with which the body is plated: they are made of a fancy device, or are left open for the creſt to be placed within; the patterns, except with creſts, make no material difference in the price; the ſize and quality make the only difference worth notice.

Fig.

Fig. 20. A fancy-worked head-plate, the middle and bottom ornamented with chaſing and piercing.

Fig. 21. A faſhionable bead-rim head-plate for a creſt to go in, ſometimes ornamented with a bottom huſk the ſame as the other.

Fig. 22. A creſt which is ſometimes made large, and wore alone, but moſtly is made of a ſize to be placed within the circle: of theſe there are different ſorts; ſome are pierced out of flat metal, and a little raiſed from the back, in imitation of emboſſed work; others are properly emboſſed: the circles, if raiſed, ſhould alſo be made of thin ſilver; the difference of expence is but trifling compared with the advantage.

PRICE

PRICE OF HEAD PLATES, PER SET.

FIG. 20, 21, 22.

Number of Head Plates to a Coach 12, Chariot 6, Phaeton 9.

		Silver.			Silver Plated. Best.			Silver Plated. Middling.			Silver Plated. Inferior.			Composition Metal.			Braſs.		
FOR A COACH.		£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
Fancy device ——	——	—	—		2	10	0	2	2	0	1	16	0	1	13	0	1	5	0
Creſts raiſed or emboſſed	——	3	0	0	1	10	0	—	—		—	—		2	0	0	1	10	0
Circles for ditto ——	——	1	16	0	1	10	0	—	—		—	—		1	0	0	1	5	0
FOR A CHARIOT.																			
Fancy device ——	——	—	—		1	5	0	1	1	0	0	18	0	1	6	6	0	12	6
Creſts raiſed or emboſſed	——	1	10	0	0	15	0	—	—		—	—		1	0	0	0	15	0
Circles for ditto ——	——	0	18	0	0	15	0	—	—		—	—		0	10	0	0	7	6
FOR A PHAETON.																			
Fancy device ——	——	—	—		1	5	0	1	1	0	0	18	0	1	15	0	0	16	0
Creſts raiſed or emboſſed	——	1	10	0	0	15	0	—	—		—	—		1	6	0	1	0	0
Circles for ditto ——	——	0	18	0	0	15	0	—	—		—	—		0	12	0	0	10	0

SECT. 7.

REAL AND SHAM JOINTS.

FIG. 23, 24, 25.

PLATED joints give to the body a very bold rich appearance, for which reaſon they are frequently uſed to bodies with fixed heads, but then are only for ornament, in imitation of the real joints: there is a material difference in the value of them; the real joint is obliged to be plated both on the out and inſide on the eight ſquares; the ſham joint is made thin and broad, and plated only on the outſide on the three ſquares, which are made broader than the others, for ſhow: others are made thick and heavy, in exact imitation of the real joint, and plated on the five ſquares; thoſe are all plated with ſilver ſoldered on the iron, the thinneſt of which will wear equal to the beſt moulding, and what is beſtowed on them, more than will ſufficiently wear with the other furniture, is ſuperfluous; the nut-ſcrews, by which the ſham or real joints are fixed, are plated; and ſometimes the props, on which the joints are ſupported from the ſides, are alſo plated, and have a broad, flat cap, plated, and put thereon: chaiſe joints are charged in ſets, landau joints only in pairs.

Chaiſe head and landau joints, painted black, are included in the value with the head of the chaiſe and the body of the landau. The additional expence for plating is only to be added here; ſham joints are never uſed otherwiſe than plated, and their value, with putting on, &c. is here ſtated in full.

PRICE OF REAL AND SHAM JOINTS.

	Silver Plated.			Compoſition Metal.			Braſs.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
A ſet for a landau ——	12	12	0	8	8	0	6	6	0
A ſet for a chair or curricle —	8	0	0	5	5	0	4	4	0
A pair for a landaulet —	6	6	0	4	4	0	3	3	0
A ſet of thick ſham joints for a coach — ——	7	0	0	4	12	0	3	10	0
A ſet of thin light ditto, ditto –	6	0	0	4	0	0	3	0	0
A pair of thick ſham joints for a chariot — ——	3	10	0	2	6	6	1	3	0
A pair of thin light ditto, ditto	3	0	0	2	0	0	1	15	0
Four barrel props and caps for a pair of either ——	1	4	0	0	18	0	0	12	0

SECT. 8.

BODY LOOPS.

Fig. 26. Thoſe are plated in the ſame manner as the joints, but generally only in particular places,

places, from the neck to the loop, either on the ſmall outſide edges, the ſtar, or the flat bolt-heads; ſometimes the whole ſurface from the neck to the loop is plated; the value of the loop having been before included with the body, the price here ſtated is only for the extra amount of plating.

PRICE OF BODY LOOPS, PER PAIR.

	Silver Plated.			Compoſition Metal.			Braſs.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
Plating the whole ſurface from the neck — — —	3	13	6	2	6	0	1	12	0
Ditto the four ſtar heads —	0	10	0	0	6	6	0	5	0
Ditto the four plain heads —	0	8	0	0	5	4	0	4	0
Ditto the two top outer edges	0	6	0	0	4	0	0	3	0

SECT. 9.

POLE HOOK.

Fig. 27. This is a convenience for drawing by, but is frequently put on the end of the pole for ornament only: it is plated, the ſame as the others, upon iron, ſometimes is only painted, but more frequently uſed plated than otherwiſe: the value of each is here ſtated, including the buckle and

and ſtrap, and fixing on the pole; there are three ſizes of them in general uſe.

PRICE OF POLE HOOKS.

	Plain Iron.			Silver Plated.			Compoſition Metal.			Braſs.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
Large ſize for a coach	0	10	0	2	10	0	1	15	0	1	6	0
Middle ditto, for a chariot —	0	9	0	2	2	0	1	8	0	1	1	0
Small ditto, for a phaeton —	0	8	0	1	18	0	0	18	6	0	15	0

SECT. 10.

BUCKLES.

Fig. 28. The plated buckles uſed to a carriage are few, but large, and are plated, like the reſt, on iron; the main-brace buckles are the principal, thoſe beſides are for the check braces; the pole-piece buckles are ſometimes plated, but in general are only poliſhed iron; the value of all buckles are regulated by their ſize as follows:

PRICE OF BUCKLES, PER PAIR.

		Silver Plated.			Composition Metal.			Braſs.		
		£.	s.	d.	£.	s.	d.	£.	s.	d.
Half buckles	2¾	0	7	0	0	4	6	0	3	6
	2½	0	6	0	0	4	0	0	3	0
	2¼	0	5	0	0	3	0	0	2	6
	2	0	4	0						
	1¾	0	3	0	0	2	0	0	1	6
	1½	0	2	0	0	1	4	0	1	0
Whole buckles	2¾	0	11	0	0	7	0	0	5	6
	2½	0	9	0	0	6	0	0	4	6
	2¼	0	7	6	0	5	0	0	3	9
	2	0	6	0	0	4	0	0	3	0
	1¾	0	4	0	0	3	6	0	2	6
	1½	0	3	0	0	2	6	0	2	0

SECT. 11.

CHECK-BRACE RINGS AND DOOR HANDLES.

Fig. 29 and 30. Thoſe ſcrew-rings and door-handles are always plated like the reſt of the iron-work; the price for plating the rings is to be added to the former ſtatements of bodies; but as, on many occaſions, they are required ſeparate, it will be neceſſary to price them both plain and plated. Plated handles are included in the former ſtatements.

PRICE

PRICE OF CHECK-BRACE RINGS AND DOOR HANDLES, PER PAIR.

	Plain Iron.			Silver Plated.			Compoſition Metal.			Braſs.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
Check-brace rings —	0	2	0	0	8	0	0	5	6	0	4	0
Door handles —	0	3	0	0	12	0	0	8	0	0	6	0

SECT. 12.

WHEEL HOOPS.

Fig. 31. It is very common to plate the hoops of the wheels both at the back and fore end of the nave. The fore hoop is conſiderably broader than the hind one; but the circumference being leſs, its value is nearly equal. They are great ornaments to the carriage, and, with care, will laſt two or three ſets of wheels, according as they are plated. There are two methods of plating hoops, the one to plate with ſilver on the iron, the ſame as theſe laſt articles, but generally are only caſed with the rolled plated metal; they may be reckoned of three ſizes, large for coach, middle for chariot, and ſmall for phaeton or chaiſe.

PRICE OF WHEEL HOOPS, PER PAIR.

	Coach.			Chariot.			Phaeton or Chaiſe.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
Plated with ſilver on iron —	3	3	0	2	12	6	2	2	0
Caſed with plated metal { beſt	1	15	0	1	10	0	1	5	0
mid.	1	10	0	1	5	0	1	0	0
infer.	1	5	0	1	1	0	0	15	0
Compoſition — —	2	2	0	1	11	0	1	8	0
Braſs — —	1	11	6	1	7	0	1	1	0

CHAP.

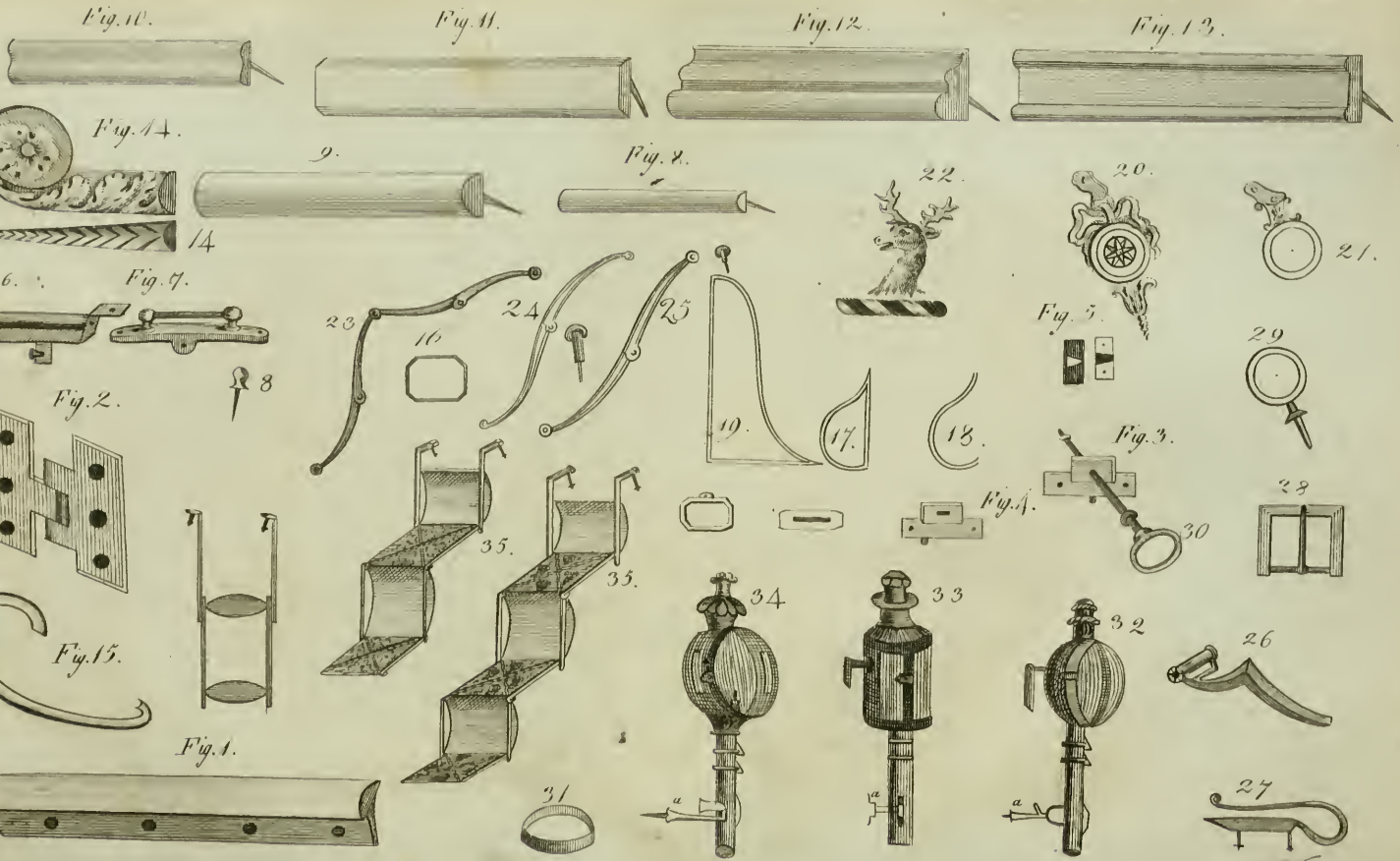


Fig. 10.
Fig. 11.
Fig. 12.
Fig. 13.
Fig. 14.
9.
Fig. 8.
22.
20.
21.
14
Fig. 6.
Fig. 7.
23
16
24
25
19.
17.
18.
Fig. 5.
29
8
Fig. 2.
Fig. 4.
Fig. 3.
28
30
35.
35.
34
33
32
26
Fig. 15.
Fig. 1.
31
27

CHAP. XII.

LAMPS.

PLATE XVIII.

LAMPS were originally uſed as neceſſary conveniencies to a carriage, but are now principally uſed for ornament, for which they are as well calculated as any article throughout. They are of various patterns, and are diſtinguiſhed by the name of the globe, the Italian, or oval lamp: the oval lamp is now the moſt general in uſe, and, like the globe, it caſts the light entirely forward: the Italian lamp does not reflect ſo ſtrong a light forward, but gives a light all round them, which is convenient to paſſengers in the carriage. There have been ſome few lamps uſed of the patent principle for burning oil, but the ſmoke they create renders their uſe objectionable; the hard ſpermaceti candle is the beſt to burn. The lamps are frequently ſmothered, or the lights go out. for want of ſufficient openings at the bottom and top to receive the air, and to diſcharge the ſmoke; the lamps are of three

kinds, three ſizes, and are three ways finiſhed, either plain or ornamented, with plating or glaſs reflectors; the large ſize is uſed to the coach; the middle ſize to the chariot; the ſmall to the gig or phaeton: they are fixed by iron-work, differently formed, according as the lamps are required to be ſet; the barrels are ſupported by ſmall iron forks or props, and are made ſecure with a leather ſtrap and buckle. The following repreſent the three lamps now moſtly in uſe, which are called the globe, the Italian, and the oval pattern lamps.

Fig. 32. The globe lamp, made round in the body, and has one large concave glaſs in front.

Fig. 33. The Italian lamp, made long, but round in the body, and has the glaſs in three diviſions.

Fig. 34. The oval lamp, has a glaſs in front, a little convexed, and two bent ſmall glaſſes on the ſides.

Theſe lamps are all manufactured of tin, on one principle, with a long caſe or barrel for the candle, having in the barrel a ſpiral wire ſpring, which raiſes the candle as it conſumes. The barrel is fixed in a ſocket of the lamp, from which it is drawn, and alſo opens at top, for the candle to be placed in, and is faſtened by two rings,

rings, or ferrels; when it is once turned round, a ſtop prevents it going farther: it has a ſmall ſtaple for the ſtrap to be placed through, and is kept ſteady by forks, or props, which ſcrew on the pillar. The heads are of various patterns, with fret, or open work, for the ſmoke to diſcharge at. The lamps remain fixed; but every time candles are uſed, the barrels are obliged to be taken aſunder, and replaced with ſome trouble, and the probability of damaging or rubbing off the paint; to remedy which, the following ſimple plan is here ſubmitted as an improvement, without making an increaſe in the expence: Let the barrel remain fixed to the lamp, and the bottom of the barrel to open on a hinge, and faſten by a ſpring ketch on the oppoſite ſide, and ſo place the candle up from the bottom, inſtead of taking off the barrel to put it in at the top; which is done without the leaſt trouble or injury.

PRICE OF LAMPS.

THE plating uſed to lamps is of rolled plated metal, which, in general, is of the worſt ſort; the reaſon is, the prices paid to the makers for them are ſo low as to make it impoſſible to afford a ſuf-

ficiently good article; but the prices here ſtated allow a ſufficiency for the beſt quality of plating; the deductions to be made for the inferior plating are, two ſhillings for the middling, and four ſhillings for the inferior ſort, for each pair.

GLOBE PATTERN.

FIG. 32.

	Large. £.	s.	d.	Middle. £.	s.	d.	Small. £.	s.	d.
A pair of plain, with common backs — —	1	18	0	1	15	0	1	12	0
A pair of ditto, with glaſs reflector backs — —	2	2	0	1	18	0	1	8	0
A pair with glaſs backs, plated heads and barrels —	2	10	0	2	6	0	1	16	6

ITALIAN LAMPS.

FIG. 33.

	Large. £.	s.	d.	Middle. £.	s.	d.	Small. £.	s.	d.
A pair of plain Italian, flat ſides	1	15	0	1	12	0	1	10	0
A pair of ditto, with round ſides	2	4	0	2	0	0	1	15	0
A pair of ditto, with plated heads and barrels — —	2	12	0	2	8	0	2	2	0

ITALIAN

NEW PATTERN OVAL.

FIG. 34.

	Large.			Middle.			Small.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
A pair of plain ovals, but with glaſs reflector backs —	2	6	0	2	2	0	1	18	0
A pair of ditto, plated —	2	10	0	2	8	0	2	6	0
A pair of ditto, with extra large plated heads — —	3	3	0	2	16	0	2	10	0

The props, ſtaples, and ſtraps, *a a a*, and alſo the painting, being neceſſary for all lamps, the above ſtatements include them.

The mounting the lamps with braſs or coloured metal, is the ſame expence as mounting with ſilver plated metal.

REFLECTORS FOR LAMPS.

THE common reflector is only a ſilvered back burniſhed, which will not admit of cleaning otherwiſe than with a little whitening and a ſoft cloth tenderly uſed.

The general ſort of reflector now in uſe, is a concave, thin, reflecting glaſs, or looking glaſs, cut in ſmall diamonds or ſtars, and ſtuck on the back: the ſmoke from theſe is eaſily wiped off, and always look well.

The

The beſt and ſtrongeſt reflectors are thoſe new-invented thick convex glaſſes which are put before the light at a proper diſtance. Thoſe glaſſes anſwer beſt for the front; being of a ſtrong ſubſtance, they are not ſo eaſily broken as the others, and they magnify the light to a great advantage, but are an addition in the expence of 1l. 6s. for each pair.

CHAP.

CHAP. XIII.

STEPS.

STEPS being of various patterns, the expence both for the iron-work and trimming is alſo different, which makes it neceſſary to treat of them ſeparately from any other ſubject. Great exactneſs is required in the making them, ſo that one joint may not bear a greater preſſure than another, as the twiſt thereof would occaſion it to break.

SECT. 1.

INSIDE FOLDING STEPS.

Fig. 35. The double and treble ſteps uſed to cloſe carriages, and hung on the bottom ſides, are made convenient to fold in a ſmall compaſs, and adapted to the height of the body; they are lined at the back and under part of the treads with good leather, of which they take a conſider-

able quantity; the treads are all covered with carpet the ſame as the bottom of the body, and the fore ſide lined and trimmed with cloth and lace the ſame as the inſide lining.

SECT. 2.

STEP-PLATES AND STOPS.

a. The ſtep-plate, fixed in the bottom ſide to preſerve the timber from injury by the ſtrain.

b. The ſtep-ſtop, which bolts on the bottom of the bottom ſide, and receives the preſſure of the ſtep when down.

SECT. 3.

OUTSIDE CHAISE STEPS.

Fig. 36. The double ſteps uſed, and fixed to the outſide of a body for a doctor's, or a two-wheeled carriage. They are of a ſimple deſign, and bear no compariſon with the other, having only one folding joint in them, being always fixed on the outſide, to prevent trouble. The treads are.

are, or ought always to be, covered with leather, to prevent accident by ſlipping off; their forms are various, ſometimes of a bell, an oval, or ſquare ſhape, as fancy may direct.

SECT. 4.

HANGING STEPS.

TO high phaetons, beſides the fixed treads, there are many ſteps deviſed, made ſo as to be uſed occaſionally, for the more eaſy accommodation of ladies; they are moſtly made to be hooked on to an upper tread when uſed; and, when out of uſe, are placed in a caſe, either at the bottom of the body, or the under part of the *carriage*.

PRICE OF STEPS.

SINGLE ſteps to *carriages* compoſe a part of the neceſſary iron-work, and are included in the ſtatements given in pages 67, 79, and 80; but as double ſteps are frequently uſed to chaiſe or curricle *carriages*, the value of both ſingle and double are here ſeparately ſtated, that the difference may be known.

Double

Double and treble folding-ſteps for coach and chariot bodies, are only here ſtated, that either pattern may be added to the former ſtatement of bodies, and ſave the trouble of ſubtracting the difference of expence of one pattern from another.

	Single.			Double.			Treble.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
A pair of inſide folding-ſteps for coaches, &c. ——	—	—		3	10	0	5	10	0
A pair of outſide ſteps for chaiſes, &c. — ——	1	1	0	1	15	0	—	—	
A hanging ſtep for a phaeton —	1	1	0	2	2	0	3	3	0

The cloth and lace with which the folding-ſteps are trimmed, are both included in the price of linings, being a part of that article; but that the complete price of ſteps may be known ſeparate, add to the above ſtatements of inſide folding ſteps, five ſhillings for the cloth and plain lace uſed for trimming each pair.

CHAP.

CHAP. XIV.

PAINTING, VARNISHING, &c.

PAINTING is not only neceſſary to preſerve, but ſerves, in a great degree, to ornament the carriage, which it does more effectually than any thing elſe beſtowed on it; and every attention of a proprietor ought to be, to ſelect ſuch patterns of colours as ſhall beſt anſwer the purpoſes of appearance and durability. The choice of colour depends entirely on fancy; but thoſe ſhould be preferred that are the moſt permanent, or that are the leaſt likely to be injured by the weather; an agreeable contraſt in the colours of the body, the carriage, and ſtripes, with which they are ornamented, requires ſome judgment, to give a proper effect to the painting.

SECT. 1.

GROUND COLOURS.

THE ground colours are the bodies of paint with which the carriage is covered previous to varniſhing; the pannels of the body are firſt prepared with a compoſition laid ſeveral times on with a bruſh, which fills the grain of the wood, and hardens ſo as to bear rubbing down to a fine ſurface with pumice-ſtone, previous to the paint being laid on; the frame-work is only covered with as many coats of paint as will fill the grain or pores of the timber. The preferable colours for wear are thoſe which are extracted from minerals, ſuch as the vermilion reds, yellows, whites, &c.; the moſt objectionable colours are the greens, in particular the verdigriſe green, though the moſt agreeable colour when freſh, yet very ſubject to decay. Very light colours are the leaſt likely to ſtand, or be well painted, as the varniſh is naturally of a darkiſh hue, which is apt to ſtain or cloud them; the darker the colours are, the fuller the varniſh may be laid on, and the ſtronger the reflection is from it; beſides, a dark colour ſhews the plated furniture to the greateſt advantage.

SECT.

SECT. 2.

PICKING OUT.

THE picking out to a carriage is the ornamenting the ground with various contraſted colours, which is to lighten the appearance, and ſhew the mouldings to advantage. There are various methods of picking out, according to fancy; but the uſual method is, to paint the mouldings with one full colour, different from the ground, which is called full-beading; another is to full-bead and line the ſides or ſquares with light ſtrokes, called lining the beads; another is to full-bead, line, and pannel, which is to paint the beads or mouldings as before, and draw fine lines along the flat ſurfaces of the timbers, in imitation of, and is called, pannelling, and alſo ornamenting with ſtars or ſcrolls in the broad ſpaces.

SECT. 3.

VARNISHING.

VARNISH is of material uſe, both for preſerving the colours, and ſhewing them to advantage, and may be ſo executed as to

reflect like a mirror; it is made of diſſolved gums in oil and ſpirits, and with it the painting is covered. The durability of the varniſh depends much on care; but frequently fails, in conſequence of being too new when uſed, or made of an inferior compoſition; the higher the varniſh is on the pannels, the better they look, but are the leſs likely to ſtand: the dark varniſh in general has the ſtrongeſt body, but cannot be uſed to cover light painting, as it ſo much diſcolours it; the light varniſh is in general ſo thin as ſcarcely to ſhew any luſtre, without a conſiderable quantity, which is difficult to lay on without clouding; ſome varniſh, ſoon after uſe, loſes its luſtre, and looks as dull as if no varniſh at all had been uſed; others crack all over, but principally on thoſe parts which are moſt expoſed to the ſun; this circumſtance is owing to the compoſition; that is, whether the gums, oils, or ſpirits, moſt preponderate; on the quality of the varniſh the permanency of the paint principally depends.

There are three methods of varniſhing the pannels, viz. the common, the poliſhed, and high varniſh; the common varniſhing is what is done to all, and is included in the charge of painting; the poliſhed is an additional quantity of three or four coats of varniſh extra, which, after being properly hardened, is ſmoothed and poliſhed with fine powder and hard rubbing; the high

high varniſh is a ſtill greater number of coats of the beſt varniſh, which is poliſhed ſo as to give it a very high luſtre, almoſt equal to a looking-glaſs.

SECT. 4.

JAPANNING.

THE japanning is covering the leathered or upper parts of the body and boots, &c. of a carriage, with a fine black, in the manner of painting; it is a compoſition of gums, ſpirits, and ſpaltams, of a thin body, reſembling varniſh; it is a ſtrong contraſt to the other colours, and anſwers both for colour and varniſh, and may be poliſhed equal to it.

SECT. 5.

HERALD AND ORNAMENT PAINTING.

IT is uſual, for the diſtinction of families, to paint on the pannels the arms and creſts they are entitled to bear, from the Office of Heraldry.

The arms of private families are borne in plain ſhields, but thoſe of the nobility have ſupporters and coronets of various patterns. A minute deſcription of the rules of Herald Painting would be unneceſſary here; a reference to *Edmonſon's Book of Heraldry* will give every information on that ſubject. Plate XIX. and the deſcription thereof, will give ſuch information as is commonly required.

The ornament painting is merely to beautify the carriage, which it does materially, when it is well executed; but, when otherwiſe, it hurts the appearance of it. This depends on the capacity of the artiſt: the pannels had better be entirely plain, than daubed, as many of them are, in imitation of painting; and in particular that of Heraldry, which requires ſome merit to execute it properly.

PLATE XIX.

Fig. 1. The arms of a bachelor in ſhield, with the creſt on a wreath.

Fig. 2. The arms of a maiden lady, in the proper-ſhaped lozenge they ſhould be borne.

Fig. 3. The arms of the ſame, empalled with thoſe of the gentleman's, ſhewing how they are borne when united by marriage.

Fig.

Fig 1.

Fig 2.

Fig 3.

Fig 4.

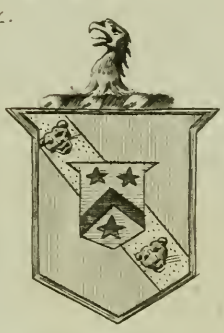


Fig 5.

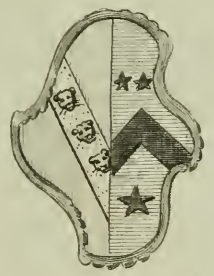


Fig 6.

Fig 7.

Fig 8.

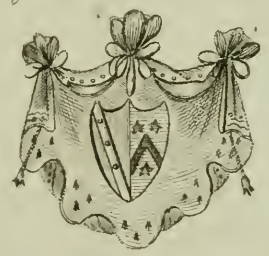


Fig 9.

Fig 10.

Fig 11.

Fig 12.

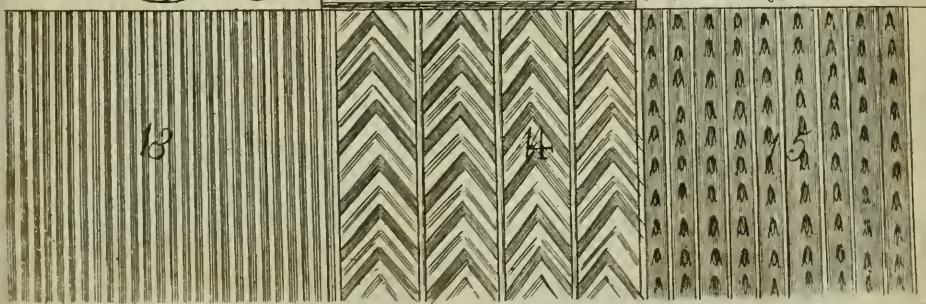


Fig. 4. The manner in which the lady's arms are to be borne, if the lady is an heireſs, which is in a ſeparate ſhield, within the centre of the huſband's, called a ſcutcheon of pretence.

Fig. 5. The form of the ſhield, called a widow's lozenge, in which either of the arms are to be placed, if the huſband dies.

Fig. 6. Two ovals, in which the arms are ſeparately placed, but not if the lady is an heireſs; the arms muſt then be borne in a ſhield, or oval, with the lady's arms in the middle: there is no rule for any form of ſhield, whether round, oval, or cornered, makes no difference for a gentleman's arms; but, for a lady's, the form of a lozenge is the rule, except when married and empalled.

Fig. 7. The ſcroll ornament, or a foliage mantle, which ſurrounds the arms or creſt, inſtead of the curtain mantles. Within the arms is the bloody hand which diſtinguiſhes a baronet.

Fig. 8. The mantle, of which there are various ſhapes, is introduced only as an ornament to contain the arms or creſt; it is a very ancient faſhion, continually fluctuating in form and ſize, but is now reviving of an increaſed ſize to what it has been.

Fig. 9. A cypher and creſt, which, either together or ſeparate, are often painted on a carriage inſtead of the arms, or on the ſide pannels

or ſtyles, when the arms are on the door and ends; the creſt muſt be in its proper colour, but the cypher ſhould be a contraſt from the ground colour.

Fig. 10. A border of a neat pattern, which is ſpread wide, and fills the ſpace allotted to it with a good effect; this is not crowded with work, and may be conſidered one of the plaineſt.

Fig. 11. A border more enriched than the other, having alſo a fillet on each ſide; this may be conſidered of the middling. kind.

Fig. 12. A border filled with ſwags of flowers, having the creſt painted at about the diſtance of every ſix inches; this may be conſidered of the ſuperior kind.

Fig. 13. The ſtriping, which is ſometimes painted on the pannels to ornament them.

Fig. 14. The ſtriping and zig-zag work, which is alſo ſometimes painted on the pannels.

Fig. 15. The ſtriping richly ornamented with huſk between: either pattern may be painted perpendicular or horizontal, as fancy may direct; the expence is the ſame either way; the cloſeneſs of the ſtripes and ornaments proportion the price, but ſhould be ſo cloſe that the ground colour be half covered with pencil-work.

PRICES

PRICES OF PAINTING.

WITH the painting of a carriage, the varniſhing and japanning are included in the price, though frequently divided by ſome, to ſanction a greater charge. What is properly an additional expence, is the ornament and heraldry work, as alſo the poliſhed or high varniſh and picking out.

It is frequently neceſſary to varniſh or japan, ſeparate from the painting, in conſequence of a failure; but this is particularly mentioned under the ſubject of repairs in the Supplement.

The ornament painting cannot be reduced to any determinate price; being of various fanciful deſigns, it entirely depends on the quantity and merit of the work. The arms and creſts, alſo the mantles which contain them, are, in general, tolerably regular in their prices, having nearly the ſame work in one pattern as another; but, when mantles are much furled, or arms much quartered, an increaſe of expence muſt be expected; as alſo when above the ordinary ſize, which is from three inches to four and a half for the arms, and from five to ſeven for the mantles; but the prices for the generality of painting may be nearly underſtood from the repreſentation in the plate, deſcribing each pattern as of three ſizes, and proportioning the prices at ſo much per foot long; the ſtriping to be charged by the foot ſquare.

PRICES OF PAINTING BODIES AND CARRIAGES.

BODIES.	Coach.			Chariot.			Large Phaeton.			Middle or ſmall Phaeton			Curricle			Whiſkeys. Half panel.			Cane.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s	a.	£.	s.	d.	£.	s.	d.	£.	s.	d.
Painting and plain varniſhing —	3	0	0	2	10	0	2	0	0	1	18	0	1	15	0	1	10	0	0	18	0
Picking out the mouldings —	0	10	6	0	10	6	0	7	6	0	7	6	0	7	6	0	7	6	0	7	6
Japanning the roof, quarters, and ſword-caſe of coach and chariot, the doors and ſword-caſe of phaetons, &c. —— ——	2	10	0	2	0	0	0	10	6	0	10	6	0	10	6	0	16	6	0	10	6
Poliſhing the pannels ——	2	10	0	2	0	0	1	5	0	1	5	0	1	5	0	1	1	0			
High varniſhing ditto ——	5	15	6	4	4	0	3	3	0	3	3	0	3	3	0	2	10	0			
CARRIAGES.																					
Plain painting and japanning the boots and budgets ——	2	2	0	2	2	0	1	15	0	1	11	6	1	7	6	1	1	0	1	1	0
Picking out the mouldings, one colour — ——	1	1	0	1	0	0	0	18	0	0	15	0	0	12	0	0	10	0	0	10	0
Ditto, two colours, lining the mouldings with ſtripes ——	1	15	0	1	15	0	1	11	6	1	10	0	1	4	0	0	18	0	0	18	0
Ditto, three colours, or pannelling and much ornamented with ſtripes — ——	2	10	0	2	10	0	2	5	0	2	0	0	1	10	0	1	5	0	1	5	0
Oil varniſhing the carriage after finiſhed with paint ——	0	15	0	0	15	0	0	15	0	0	15	0	0	10	6	0	10	0	0	10	0

This

This ſtatement will anſwer for the new painting of old bodies and carriages, by deducting one-fourth from the value of the firſt ſum for plain painting and japanning—for example:

	£.	s.	d.		£.	s.	d.
A new coach body painting is — —	3	0	0	An old one	2	5	0
Ditto japanning —	2	10	0	ditto	1	17	6
Carriage painting —	2	2	0	ditto	1	11	6

All the other charges are the ſame.

PRICES OF ORNAMENT AND HERALD PAINTING.

	Large.			Middle.			Small.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
A ſingle coat of arms to either pattern in the Plate —	0	10	0	0	7	0	0	5	0
A pair of ſupporters —	2	2	0	1	11	6	1	1	0
A creſt — ——	0	5	0	0	4	0	0	3	0
A ditto, with a duke's, earl's, or baron's coronet —	0	10	0	0	8	0	0	6	0
A cypher of one letter —	0	3	0	0	2	6	0	2	0
A ditto of two letters —	0	4	6	0	3	6	0	2	6
A ditto of three letters —	0	5	0	0	4	0	0	3	0
A mantle of the uſual pattern —	0	10	6	0	7	6	0	5	0
A ditto much furled —	0	15	0	0	12	0	0	10	0
Inch. wide.	Rich.			Middle.			Plain.		
Borders, per foot long 5	0	10	0	0	7	6	0	5	0
4	0	7	6	0	6	0	0	4	0
3	0	6	0	0	4	6	0	3	6
2	0	4	6	0	3	6	0	2	6
1½	0	3	6	0	2	6	0	1	6
Fillets ditto 1	0	2	6	0	1	9	0	1	0
¾	0	1	9	0	1	0	0	0	9
½	0	1	0	0	0	9	0	0	6
Striping on pannels, per foot ſquare — ——	0	10	0	0	7	6	0	5	0

CHAP.

CHAP. XV.

CHAISE HEADS, WINGS, KNEE-BOOTS, AND DASHING LEATHERS.

THOSE are conveniencies not all regularly uſed with every kind of carriage; but there are no phaetons or chaiſes finiſhed without one or the other, which makes it neceſſary to deſcribe them ſeparately, that the proprietor of a carriage may chuſe either, as is beſt ſuited to his inclination.

SECT. 1.

CHAISE HEADS.

PLATE XX.

HEADS to phaetons or chaiſes, &c. are found great conveniencies for ſheltering from the ſun, wind, or rain; and, excepting to very light carriages, ought not to be diſpenſed with. The principal

Plate XX.

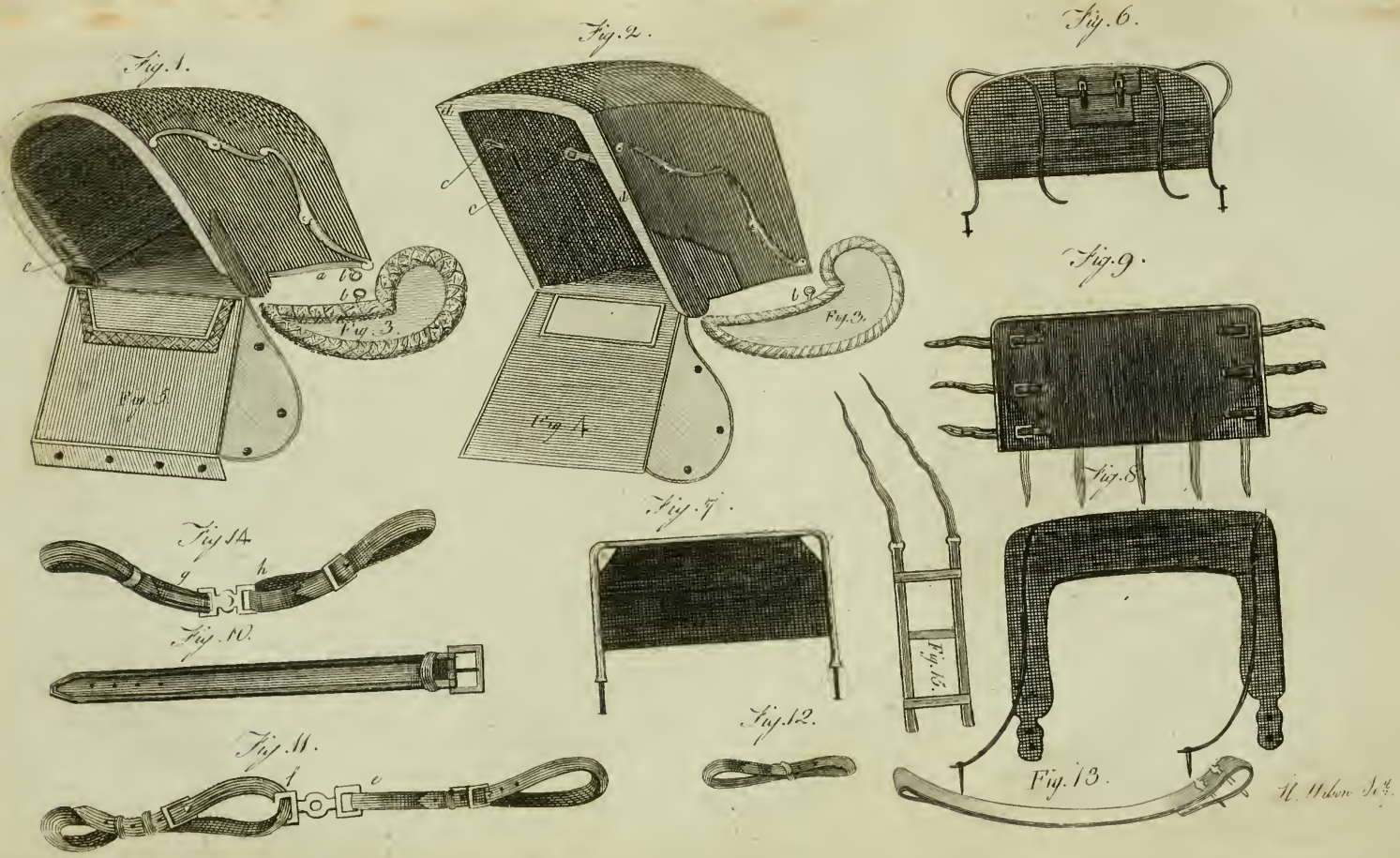


Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.
Fig. 5.
Fig. 6.
Fig. 7.
Fig. 8.
Fig. 9.
Fig. 10.
Fig. 11.
Fig. 12.
Fig. 13.
Fig. 14.
Fig. 15.
H. Wilson Sc.

principal objections to them are, the additional weight of themſelves, beſides impeding the draught, if oppoſite to the wind; but one great advantage in them is the eaſe they can be removed with, according to the expectation of the weather. They are of two different forms, and are furniſhed with different conveniencies; but are all made as is deſcribed in Plate v. with light wooden ribs, which are afterwards covered with a grained leather, and lined with woollen, ſerge, or broad cloth, the ſame as the body is lined with. The cloth is the preferable lining, though ſerge is often ſubſtituted in its place.

Fig. 1. Repreſents a round or waggon-head, made on an iron frame *a a*, by which means it is eaſily removed, when the wings are to be uſed, which are ſecured by the ſame fixtures *b b* as the head is. The inſide is furniſhed with two curtains *e e*; the narroweſt is hung on the driving ſide, for freedom to the driver; the wideſt is to ſhelter the other paſſenger.

Fig. 2. Repreſents a ſquare head, with conveniencies on the inſide at *c c* to ſet and reſet the head, without the trouble of reaching over to put up or down the joints, from the outſide, as uſual; the ſeams of the leather are ſewed in welts, and round the front *d d* a broad ſtripe of leather, welted

welted on the edge, is nailed, which ſhelters the inſide, and is called a vallent.

SECT. 2.

WINGS.

ARE fixed to the ſides or elbows of the chaiſe bodies, when a head is not uſed; their uſe is to form a reſt for the arm, and ſhelter the paſſenger from the dirt which ſplaſhes from the wheels; they are light iron frames, covered with leather, and lined with cloth and lace, to anſwer the lining, and are moſtly ornamented round the outſides with a plated frame; to ſlight cheap-built carriages the wings are ſometimes made of wood only.

Fig. 3. Are two wings, with different trimmings; they are made to fix at the points in ſquare ſtaples, and are ſcrewed on the elbow-rails with ring-ſcrews.

SECT.

SECT. 3.

KNEE-BOOTS, OR APRONS,

ARE coverings for the knees of the paſſengers in a chaiſe or phaeton; they are made of a fine grain leather, the ſame as the head, and lined with linen or light woollen ſerge, with a flap made of the ſame materials as the lining, which turns over and ornaments the top; they are made to extend from the foot-board, to which they are fixed, to the top of the elbow in front, with cheeks ſewed and welted on the ſides, and are faſtened to buttons fixed on purpoſe for them.

At the top of ſome knee-boots, an iron-jointed rod is ſewed in the leather, which fixes in ſpring ſockets on the elbow-rail; the particular uſe of the rods is to ſupport the knee-boot ſtraight and free from the knee of the paſſenger, and to preſerve them from the chance of falling out by the violence of any jolt the carriage may meet with.

Fig. 4. A knee-boot made to fix on the foot-board, and to hitch on at the top with a ring or leather loop to a button; the rings are moſt convenient.

Fig. 5. A knee-boot, which takes off occaſionally, being only hitched on to buttons fixed in

in the footboard, having alſo an iron frame at the top for ſafety.

SECT. 4.

DASHING OR SPLASHING LEATHERS,

ARE conveniencies made to fix on the fore part of a carriage, to prevent the dirt ſplaſhing againſt the pannels or paſſenger, and alſo to hide the poſteriors of the horſe.

They are iron frames of various forms, covered with leather, which is either dreſſed in oil, or japanned; they are ornamental conveniencies now very generally uſed, in particular to curricles; the top ends are formed in loops, for the hands to be placed in, to aſſiſt the perſon getting up.

Fig. 6 A daſhing-leather for a curricle, having loops projecting out for the hand to aſſiſt getting up by, and ſtays on the frame which fix on to the back-bar, and keep it ſteady; on the inſide is a leather pocket, for the purpoſe of carrying lince-pins, &c.

Fig 7. A daſhing-leather for a one-horſe chaiſe carriage, having no back-ſtay, or iron loops for the hand, the leather is cut out at the

corners of the frame to anſwer the ſame purpoſe; thoſe are made much lighter than the others.

Fig. 8. A daſhing-leather for a poſt-chaiſe carriage, which is made to fill the ſpace between the ſprings and the boot, which it is formed to the ſhape of, and encompaſſes, having at the back long ſtays, which help to ſupport it; when the common coach-box is taken off, thoſe are made to fix in its place.

Fig. 9. A daſhing-leather for the body of a poſt-chaiſe; this is not an entire frame, but only top and ſides, round which the leather is ſewed, and buckles to the bottom of the body; it is fixed on the fore main braces, with either bolts or buckles: this entirely preſerves the front pannel from dirt, when travelling on wet roads.

PRICE OF HEADS, WINGS, KNEE-BOOTS, AND DASHING-LEATHERS.

WITH thoſe conveniencies every thing is included in the price, except the plating; ſo that the difference of any pattern may eaſily be known; and the ſeparate amount of either, added to the former ſtatements, will give the value of carriages when completed with either of them.

HEADS

HEADS.	Lined with Cloth. £.	s.	d.	Serge. £.	s.	d.
A plain fixed head, lined with cloth —	10	0	0	8	10	0
A plain fixed round ditto, ditto —	12	0	0	10	10	0
The joints to turn with inside wrenches –	1	10	0			
A frame to take off the head occasionally	1	6	0			
A pair of curtains, bound with narrow lace —— ——	0	18	0	0	10	0
A pair of oil-skin ditto, lined with linen	0	16	0			
A small back-light, without a plated frame	0	6	0			

WINGS.

	Large. £.	s.	d.	Middle. £.	s.	d.	Small. £.	s.	d.
A pair of iron-framed wings trimmed with two-inch lace	1	15	0	1	12	0	1	10	0

KNEE-BOOTS.

	Large. £.	s.	d.	Middle. £.	s.	d.	Small. £.	s.	d.
A knee-boot fixed on the foot-board — ——	2	4	0	2	0	0	1	18	0
A ditto to take off occasionally	2	8	0	2	6	0	2	2	0
An iron-jointed frame —	0	18	0	0	17	0	0	16	0

Silvered buttons, with which they are fastened, are included in the above price; the lace for the falls is considered of two inches width.

DASHING.

DASHING LEATHERS.

	£.	s.	d.
A curricle daſhing-leather, with ſtays, ——	2	10	0
A light chaiſe ditto, no ſtays — ——	1	15	0
A poſt-chaiſe ditto, with ſtays — ——	3	0	0
A poſt-chaiſe or coach body ditto with buckles	2	12	6
A pocket for either —— ——	0	5	0

CHAP. XVI.

BRACES, POLE-PIECES, &c.

PLATE XX.

ARE the leather ſtraps, of various ſizes, made up with buckles, and are what the body is hung and checked by.

SECT. 1.

MAIN BRACES.

Fig. 10. Are what the body hangs by; the ſize and thickneſs ought to be proportioned to the weight they are to ſuſtain: the breadth for a coach is two inches and three quarters; for a chariot, two inches and a half; a phaeton, two inches and a quarter; a chaiſe, or other light body, two inches: they are of two, three, or four ſtripes, faſtened together by four rows of ſewings, and are made up with large plated buckles.

SECT.

SECT. 2.

COLLAR BRACES.

Fig. 11. Are thoſe that go round the perch or crane, and are buckled through a loop or ring, fixed to the bottom of the body, to check the motion ſideways, and to confine it from ſtriking againſt the wheels. Thoſe for heavy bodies are of a double thickneſs, but ſingle ſtripes to light bodies, ſuch as phaetons or gigs, are ſufficient. Some are fixed to the perch-loop as *e*, while others run through the loop as *f*, to take off occaſionally. The breadth is in general an inch and three quarters.

SECT. 3.

CHECK BRACES.

Fig. 12. Are for the purpoſe of checking the motion endways, placed at the four angles of the body, and are always of ſingle ſtripes of leather; on phaeton or chaiſe bodies, they ſometimes croſs the angles for ornament only. The uſual ſize is an inch and a half broad, but of different lengths.

SECT. 4.

SAFE BRACES.

Fig. 13. Are things but ſeldom uſed: their purpoſe is to receive the body, if, by accident, the ſprings, the loops, or ſhackles fail. They are fixed to irons, which are placed to the four angles of the carriage, in the ſame manner as the ſprings are, and hang looſe under the body; they are very neceſſary for travelling carriages; the uſual ſizes is half an inch thick, and two inches and a quarter broad, and from ten to eleven feet long.

SECT. 5.

POLE-PIECES.

Fig. 14. Are the ſtraps which couple the horſes to the pole, and are regulated by the ſize and weight of the carriage; they are from one inch and three quarters to two inches and a quarter broad, and thick in proportion; they are ſometimes fixed to the pole end, and are called French and Engliſh pole-pieces; thoſe that run through a loop at the pole end, to take off occaſionally, are

are the French pole-pieces, *h*, which are a preferable ſort; the others fixed to the pole end, as *g*, are the Engliſh.

PRICE OF BRACES.

IT is frequently a rule to charge one general price for coach and another for chariot braces, including the buckles; but the moſt perfect method is to charge for the length of each per foot, and to add the price of buckles to the amount: there being many different ſizes of ſtraps for other uſes beſides braces, the value of any may be collected from this rule; there is alſo a difference to be made, if the braces are of a different thickneſs, for ſtrong, light, or common buſineſs; the middle ſize is what is moſtly uſed.

Inches wide.	2¾		2½		2¼		2		1¾		1½	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d	s.	d.
Strong for heavy travelling bodies — ——	4	6	4	0	3	6	3	0	2	6	2	0
Common ſize ——	4	0	3	6	3	0	2	6	2	0	1	6
Light for phaetons ——	3	6	2	6	2	6	2	0	1	6	1	0
Single ſtripes of leather —	2	0	1	9	1	6	1	3	1	0	0	9

The meaſure to be taken from the bridge of the buckle to the point of the ſtrap.

The lengths of coach and chariot braces are nearly the ſame with each other, which, in general, meaſure about four feet; ſo that, including

the buckles with the braces, the uſual prices charged for common braces are,

	Coach.			Chariot.		
	£.	s.	d.	£.	s.	d.
Main braces, with plated buckles, the ſet	4	4	0	3	13	6
Check braces, with ditto, the ſet —	0	12	0	0	12	0
A pair of ſafe braces, with fixtures —	4	4	0	3	13	6
Croſs ditto, the pair — —	0	7	6	0	7	6
Single collar braces, with iron buckles, the pair —— ——	0	12	0	0	12	0
Double ditto, ditto ——	0	15	0	0	15	0
French pole-pieces, with poliſhed buckles, the pair —— ——	1	6	0	1	4	0
Engliſh ditto —— —	1	0	0	0	18	0
A ſet of point-ſtraps and plated buckles for main braces — ——	0	6	0	0	6	0

For *Price of Cradles*, ſee page 131.

CHAP.

Plate XXI

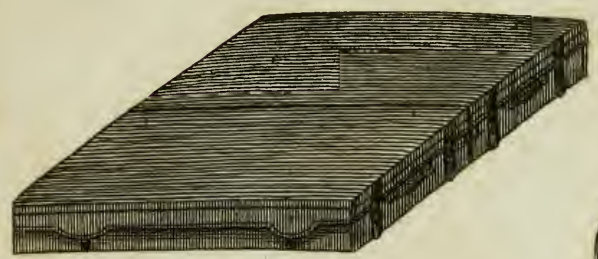


Fig. 1.

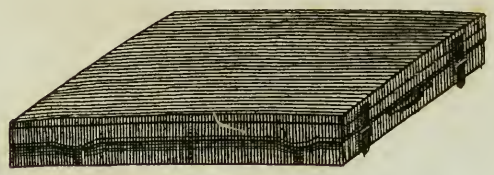


Fig. 2.

Fig. 6.

Fig. 3.

Fig. 5.

12

Fig. 4.

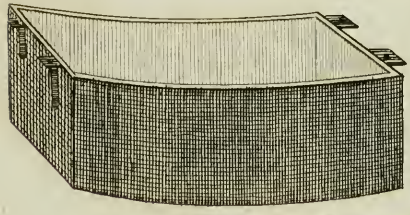


Fig. 8.

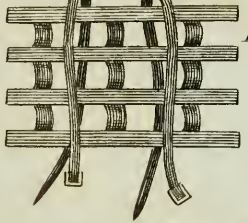
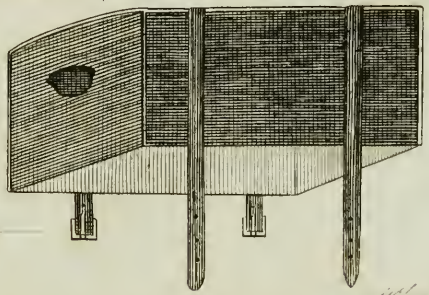
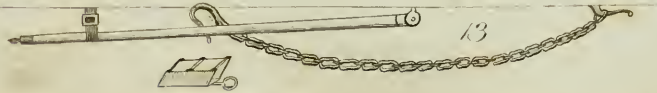


Fig. 7.





13

Wilson sc.

CHAP. XVII.

TRAVELLING CONVENIENCIES.

PLATE XXI.

THERE are many conveniencies uſed with carriages, but more eſpecially with thoſe for travelling, that are not manufactured, but only ſold and fitted by the coachmakers; the principal of which are, trunks, imperials, cap and hat boxes of various deſcriptions; thoſe things are uſually made of boards, covered with leather of two or three ſorts, in which there is a material difference: the beſt leather is the ox hide, called neat's leather; but horſe hides are moſt frequently uſed, and are ſufficiently good for the purpoſe: but an inferior leather is often ſubſtituted, which is not of one-fourth the value of the horſe-leather, though often impoſed for it —this is ſheep-ſkin, commonly called bazil leather, which is of ſo ſlender a texture, that it tears almoſt like paper. For many light purpoſes, ſheep-ſkin covered trunks will anſwer in place of a better leather, and a material ſaving of expence will be made.

SECT. 1.

TRUNKS.

Fig. 3. Trunks uſed for carriages are required to be made particularly ſtrong, and are moſtly ſtrengthened at the corners and joints with thin iron plates; the leather which covers them alſo adds to the ſtrength; they are uſually braſs nailed on the outſide, which is done to ornament and preſerve the leather from injury by rubbing; in particular, if covered with bazil leather: they are lined with paper or linen; the linen is to be preferred.

SECT. 2.

INSIDE STRAPS AND LATHS.

Fig. 7. Are conveniencies to confine what the trunk contains from ſhifting about: they are made with four or five laths, covered with cloth or paper, which are nailed at a ſmall diſtance from each other to three pieces of girth web, and lie at the top of the parcels within the trunk; on the

the bottom of the trunk ſtraps are nailed, which buckle round the laths, and keep all tight.

SECT. 3.

TRUNK COVERS.

Fig. 4. Theſe are made to fit the outſide of the trunks, which they cover and preſerve while in uſe; they are only made to cover thoſe trunks which are expoſed to the weather, and are uſually made of thick painted cloth, with holes at the ſides for the handles of the trunk to be got at.

SECT. 4.

TRUNK STRAPS AND BELTS.

Fig. 9 and 10. Are to confine and ſecure the trunk from ſhifting about, or from being ſtolen; the ſtraps are made of common thick leather of about an inch and a half broad, with an iron roller buckle. The chain-belt is a contrivance to fix round the trunk, which it locks to the platform; it is made of thin ſheet iron, jointed by wire loops,

loops, and covered with thin leather, and is ſecured by a padlock.

SECT. 5.

IMPERIALS.

Fig. 1 and 2. Theſe are large flat caſes, made to the form of the whole, or part, of the roof of the body; they are great conveniencies to carry light articles ſafe, moſtly deſigned for apparel: they are made of light, thin deal boards, covered with neat's leather, and lined with linen; the bottom is lined with tow and baize, to prevent its rubbing the roof: if intended to cover the whole of the roof, they are moſt convenient to remove, if divided into two parts; and, as the half is often ſufficient for uſe, it ſaves unneceſſary luggage. Of thoſe things there is alſo a difference in the materials, and method of making. They are fixed on the roof by means of ſtraps and ſtaples, which are included with the imperials, in the prices ſtated for them.

SECT. 6.

CAP BOX.

Fig. 5. A cap-box is a caſe made convenient for carrying ladies' head-dreſſes ſafe; they are of a roundiſh form, and are moſtly hung on the back of the body, reſembling a ſword-caſe; the lid is faſtened ſometimes in the manner of a portmanteau, or with a ſingle lock; it is fixed on the back by means of thumb-ſcrews and key-ſtaples; but, like the trunk, is made of different materials, according to the price.

SECT. 7.

HAT BOXES.

Fig. 6. A hat-box is a convenience for carrying hats, made of ſtout leather, in the exact form of a hat, opens at the bottom, and is ſecured by a padlock; it is uſually faſtened to the roof, or front budget of the carriage, with ſtraps.

SECT.

SECT. 8.

WELLS.

Fig. 8. A well is a convenience uſed in travelling carriages for ſtowage; it is a ſtrong wooden caſe fixed on the bottom of the body with ironwork, ſo as to be occaſionally taken off, if deſired; the acceſs to it is from the inſide of the body, having a trap-door in the bottom, under the carpet, and ſecured by a lock: if wells are made to bodies hanging on perch carriages, there muſt be two of them—one on each ſide of the body, with the perch between them; they are lined with linen or baize, but painted black on the outſide.

SECT. 9.

SPLINTERS, OR SPLINTER-BARS,

Fig. 12. Are the ſhort bars which are hung to a hook at the end of a pole, when leading horſes are required: there are three uſed, hung to each other—the centre one hooks on the pole end, the other two hook on the ends of it: on each end of

of the two out-ſplinters, the traces of the harneſs are faſtened; ſometimes the traces of the leading harneſs are fixed to the collars of the wheel-harneſs, which method looks beſt; but the draught is not ſo equal as when drawn from ſplinters: a ſpare bar or two is always neceſſary, in caſe of one breaking by a ſudden pull of the horſe.

SECT. 10.

DRAG-CHAINS AND STAFF,

Fig. 13. Are neceſſary to every travelling carriage; the chain is to lock the wheels, and to prevent the velocity of the carriage being too great when deſcending a hill; the ſtaff is to ſtop the carriage, and to give reſt to the horſes when aſcending a hill; the chain is fixed to a hook about the middle of the perch or crane, with a hook or ſhoe at the end for the wheels; the hook is moſt handy for uſe, but the ſhoe is preferable, as it preſerves the iron of the wheel from injury, when dragging on hard, ſtony ground; the chain being covered with leather prevents it from rattling; the drag-ſtaff is fixed nearer the hind part of the carriage, with jointed iron-work, and is made of ſtrong aſh, with iron

ferrules on the ends, and a ſpike at the bottom, to make it hold ſecure in the ground; they are both faſtened up with ſtraps when out of uſe.

SECT. 11.

OILED COVERS TO THE BODY,

ARE to preſerve the paint from the injury of the road-dirt, or boughs, while travelling: oil-ſkin covers are frequently uſed, and are ſo made that the doors may open and ſhut with the cover on; every part of the body, except the windows and bottom, is covered; it is made to fit to the exact form of the body, and looped on to ſmall plated buttons, ſo as to be taken off occaſionally; they are made of common oil linen, lined with a ſoft baize, and bound with a worſted tape.

SECT. 12.

SPRINGS CORDING.

THE purpoſe of cording ſprings is to prevent danger and delay, if by accident a plate ſhould break, and alſo to ſtrengthen them when required

ed to be heavy loaded: to carriages that have heavy imperials, and much luggage in the body, it is very neceſſary, which is done by placing a thin piece of aſh, or a length of cord along the back, and afterwards twiſting a ſmall, but ſtrong, cord round, and faſtening it well at the top.

SECT. 13.

TOOL BUDGET,

IS a ſmall convenience made to hang by ſtraps under the hind part of a carriage, for the purpoſe of carrying a few ſpare bolts, nuts, lince-pins, nails, &c. with the few requiſites for the coachman's uſe—ſuch as a wrench, a hammer, a chiſſel, a pair of pincers, &c. that in caſe of trifling accidents on the road, the defect may be ſupplied without delay.

PRICE

PRICE OF TRAVELLING REQUISITES.

IN the value of thoſe things are included the painting, the ſtraps, buckles, ſcrews, bolts, &c. with which they are faſtened.

TRUNKS.	Large. £.	s.	d.	Middle. £.	s.	d.	Small. £.	s.	d.
Beſt leather, welted or nailed, lined with cloth ——	3	13	6	3	0	0	2	2	0
Bazil leather, ditto, ditto, lined with paper ——	3	0	0	2	10	0	1	15	0
Inſide ſtraps and laths ——	0	6	0	0	5	0	0	4	0
TRUNK COVERS.									
Trunk covers made of neat's leather — ——	2	5	0	1	15	0	1	1	0
Ditto made of oil or painted cloth — ——	0	10	6	0	7	6	0	5	0

STRAPS AND BELTS.

	s.	d.
Straps and belts, 1½ inch wide, iron buckles, at per foot	1	3
Chain belts, 1½ inch wide, with padlock, at ditto	2	9

IMPERIALS.	Beſt. £.	s.	d.	Inferior. £.	s.	d.
A whole imperial for a coach roof —	10	10	0	9	9	0
Two ditto for ditto — ——	11	0	0	10	0	0
A ſmall one for the middle only —	5	15	6	5	0	0
A whole imperial for a chariot roof —	7	7	0	6	10	0
Two ditto for ditto — ——	7	17	6	7	0	0
A ſmall one for ditto — ——	4	10	0	4	0	0
CAP-BOX.						
A cap-box with faſtenings complete —	3	10	0	3	3	0
HAT-BOX.						
A hat-box with a padlock and two ſtraps	2	12	6	2	5	0

WELLS.	Coach or Chariot. £. s. d.
A large well for the body hanging on a crane-neck carriage	2 12 6
Two ſmall ditto for the body hanging on a perch carriage	4 14 6

SPLINTER-BARS.	
A ſet of ſplinter-bars complete	1 5 0
A main, or middle ditto	0 10 0
An end, or draught bar	0 7 6

CHAINS AND STAFFS.	
A drag-chain, with hook	0 8 0
A drag-chain, with ſhoe	0 15 0
Covering the chain with leather	0 4 0
A drag-ſtaff	0 10 6

OIL-COVERS.	Coach. £. s. d.	Chariot. £. s. d.
An oil-cover complete, with plated pins	5 10 0	4 10 0

SPRINGS CORDING.	Coach or Chariot. £. s. d.
Cording a ſet of ſprings	1 1 0

TOOL BUDGET.	
A coachman's tool budget	0 10 6

CHAP. XIX.

HANGING OF BODIES.

THE bodies of carriages are ſuſpended from the ſprings by braces; the proper method of executing this, adds much to the elegance of the carriage, and eaſe of the paſſengers; in particular in four-wheeled carriages, where the rule of hanging ſhould be ſuch as to be free from the obſtruction of the fore wheels when turning, and without hanging too much within the hind wheels; and if on a crane-necked carriage, to obſerve that a regular diſtance be preſerved between the crane and the bottom of the body, which ſhould be hung ſo as that the doors be directly perpendicular; but faſhion has introduced a method of hanging the bodies of coaches and chariots low behind, which has been followed to an extremity; the advantage of this method is certainly eaſe to the rider, and to chariots it may be preferred on that account; but to coaches, it not only looks improper, but takes away the advantage of equal accommodation, by making one ſeat more eaſy than the other.

To

To phaetons, gigs, or curricles, there are various methods of hanging, ſometimes from braces at both ends, but are moſtly from the hind end only, and that in different directions, from the ſprings to the bottom or middle of the body; the fore-end ſprings are often fixed to both body and carriage, and, being united at the ends, depend on their own elaſticity for eaſe; if the hanging will admit a brace, however ſhort, it is preferable; the ſprings with a brace round them, agreeable to the preſent faſhion of hanging gigs or curricles, have the advantage for eaſe.

The placing of phaetons ſo forward as uſual, is to give advantage to the driver over the horſes, and to eaſe the draught, by bringing the weight forward; but does not look ſo well as if hanging between the wheels.

In all carriages, the body ſhould be ſo hung as that the acceſs to it may be no way obſtructed by the wheels, which is frequently the caſe, particuly to one horſe carriages.

END OF THE FIRST VOLUME.

A

PLAN

FOR

REGISTERING,

SO AS TO PURCHASE

CARRIAGES AND HORSES,

WITHOUT EXPENCE OR TROUBLE.

By WILLIAM FELTON, Coachmakèr,
No. 36, LEATHER-LANE, HOLBORN.
And No. 254, OXFORD-STREET, near GROSVENOR-SQUARE.

PLAN, &c.

THE inconveniencies gentlemen are expoſed to, who attempt to buy or ſell horſes or carriages on their own judgement, has induced W. FELTON to propoſe to the public the following plan, whereby thoſe impoſitions ſo commonly practiſed may be avoided, and greater advantages derived than from any mode ever yet adopted.

Any

Any perſon, having either horſe or carriage to ſell, or wanting to purchaſe either, may be readily ſuited without trouble, expence, or riſk. Thoſe who want to ſell are to ſend in writing the particular deſcription with the price, where, and at what time, it is to be ſeen; which will be correctly copied, and inſerted in books kept for the purpoſe: and thoſe wanting to purchaſe, are alſo to ſend a deſcription of the things wanted, and references will be immediately given to thoſe likely to ſuit, ſo that principals meet, and treat with each other.

To make it more convenient, and alſo to facilitate the objects of this deſign, a regularly-printed catalogue will be publiſhed once a month, containing the various kinds of carriages and horſes wanted either to purchaſe or ſell; and, for the convenience of the public, one of thoſe

of thoſe catalogues will be left at the bar of each principal coffee-houſe in town. In the catalogue a minute deſcription will be given, the proprietor's name and addreſs only omitted.

The hope of extending his buſineſs is the principal advantage W. FELTON expects to derive by this plan, as no charge whatever is made for trouble of regiſtering, the expence of catalogues, referring, &c.—the only conſideration he expects is from thoſe who are ſuited, by this means, with a carriage, to employ him to do the repairs, or make ſuch alterations as may be found neceſſary, which will be done agreeable to the prices he has publiſhed; and thoſe who ſell, are to allow a commiſſion of two and a half per cent. on the amount regiſtered for, whether horſe or carriage; ſo that, in fact, nothing is expected, if

no benefit is derived. If called upon to attend, and purchaſe for any one, or ſet a value, two and a half per cent. on ſuch valuation, or amount of purchaſe, will be expected for his judgment and trouble. Not being a competent judge of horſes, he declines purchaſing or valuing them on any conſideration.

W. Felton has been induced to reviſe his former plan, where money was taken for regiſtering, to prevent others impoſing on the public, who, for the expectations of the advanced money, has pirated his plan, and opened offices of the ſame deſcription; but the public muſt be aware of the diſadvantages of countenancing others, for by dividing the number regiſtered, ſo fair a chance of being ſuited cannot be expected as if they were all contained in one liſt.

CARRIAGES

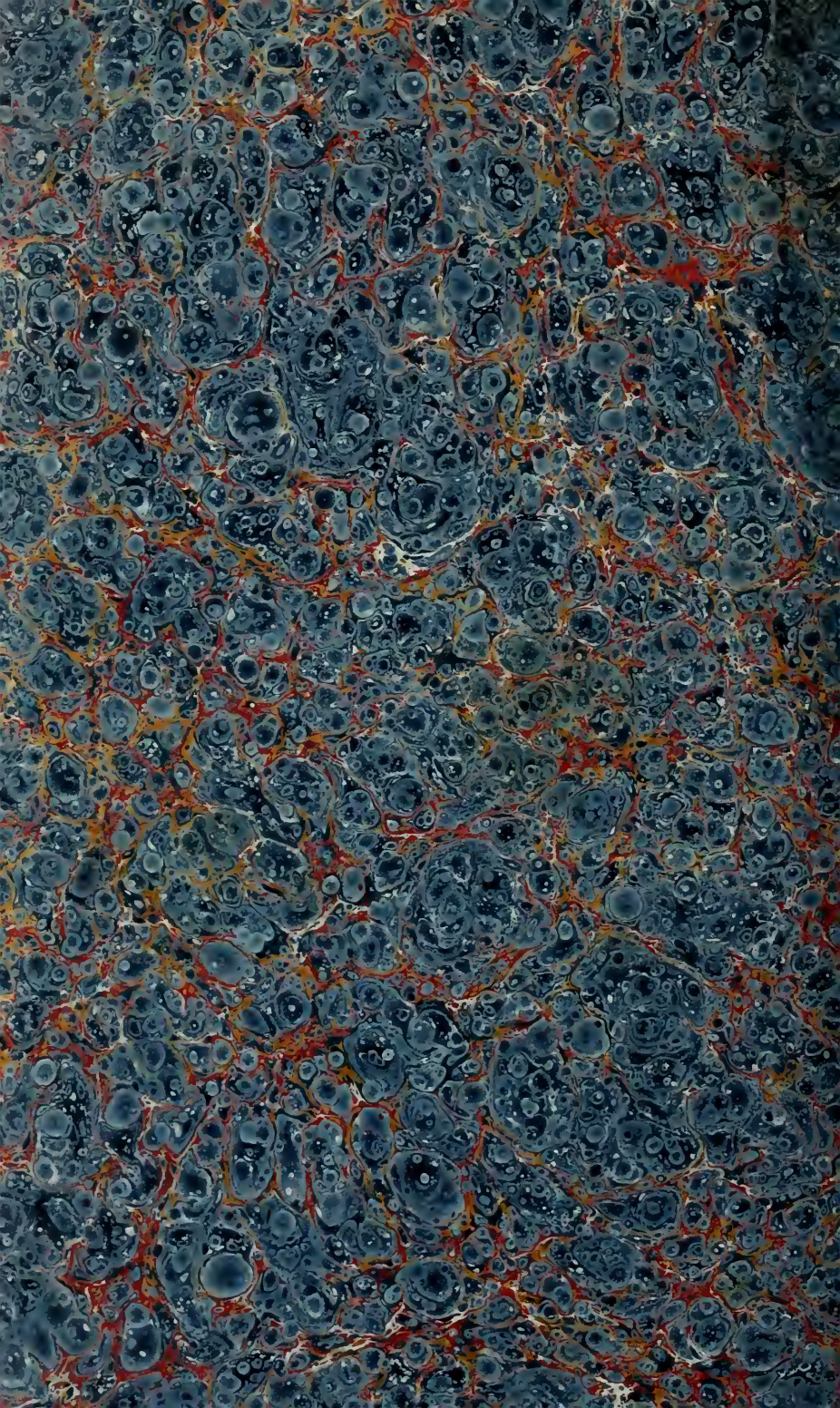
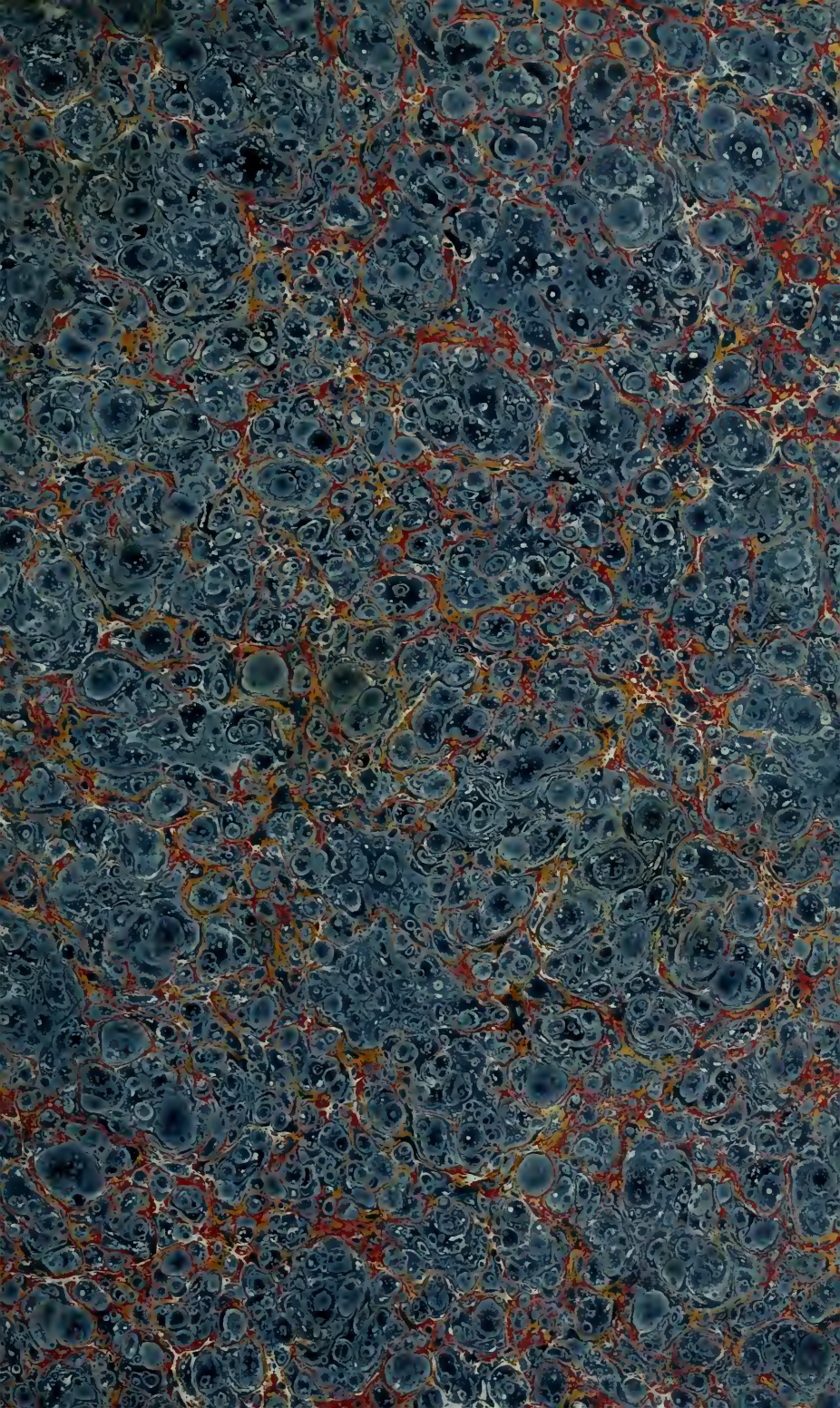
CARRIAGES PRESERVED.

W. FELTON, wiſhing to make himſelf every way uſeful to the public, proffers his ſervices in this ſingular, but uſeful, plan.

Carriages are often as much injured by neglect as by uſe, and, for the want of proper care, often become an expenſive charge, and perſons riding in them are often expoſed to danger, for want of timely repairs.

To prevent thoſe inconveniencies, W. F. offers his ſervices to ſuperintend the care of them, without expecting any other intereſt than a ſmall annual charge for his trouble. He will attend

at leaſt once a fortnight, on regular days, to examine the carriage, and ſee if any repair is wanting; if it is properly taken care of; to direct what is neceſſary to be done; and to prevent that from being done which is not neceſſary. It is preſumed much advantage will be derived from the above plan; and any gentlemen who chuſe to countenance W. F. in it, are requeſted to ſend their names; as it will not be worth his attending without, at leaſt, 100 engagements. The only expence is One Guinea per year, half to be paid on the firſt attendance, and the other half at the end of the year. It is preſumed much will be ſaved, beſides the ſatisfaction of having the carriage well looked after, without the leaſt trouble to the proprietor in ſuperintending the care of them.

For

For the greater convenience of profecuting thofe plans to advantage, W. F. has opened two houfes, the one fituated No. 36, Leather-Lane, Holborn, near Liquorpond-Street; the other, No. 254, Oxford-Street, near Grofvenor-Square; where all letters directed, and poft-paid, will be attended to.